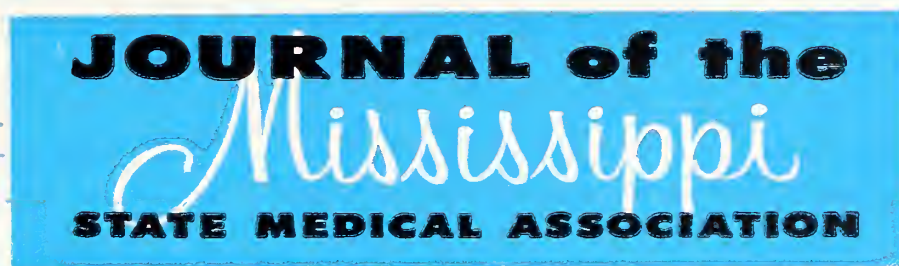


HEALTH SCIENCES LIBRARY
UNIVERSITY OF MARYLAND
BALTIMORE



Digitized by the Internet Archive
in 2016

<https://archive.org/details/journalofmississ8112miss>



VOLUME VIII

January-December, 1967

- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
TEMPLE AINSWORTH, M.D.
President
JOSEPH B. ROGERS, M.D.
President-elect
WALTER H. SIMMONS, M.D.
Secretary-Treasurer
WILLIAM E. LOTTERHOS, M.D.
Speaker
JAMES L. ROYALS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

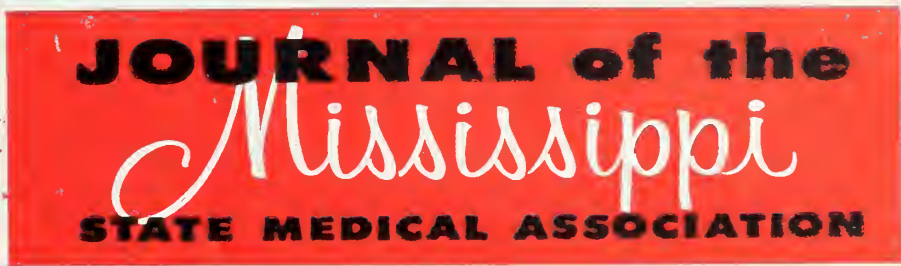
Mississippi State Medical Association
735 Riverside Drive
Jackson 39216

HEALTH SCIENCES LIBRARY
UNIVERSITY OF MARYLAND
BALTIMORE

X68-2028

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded December 15, 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi. Office of publication, 1201-05 Bluff Street, Fulton, Missouri. Copyright 1967, Mississippi State Medical Association.

Volume VIII
Number 1
January 1967



- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
JAMES T. THOMPSON, M.D.
President
TEMPLE AINSWORTH, M.D.
President-elect
JAMES L. ROYALS, M.D.
Secretary-Treasurer
HOWARD A. NELSON, M.D.
Speaker
WILLIAM E. LOTTERHOS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

CONTENTS

ORIGINAL PAPERS

- Utilization Review
Committees: Their
Role and Function 1 MATTHEW MARSHALL, M.D.
- The Use of Intra-
Uterine Devices
in Sunflower County 14 THOMAS STANLEY MARTIN, M.D.
- Hemolytic Disease
Due to Anti-D
Isoimmunizations in
a First Born Infant 17 JOHN D. COFFEY, JR., M.D.

SPECIAL ARTICLES

- Coronary
Heart Disease 5 WILLIAM H. ROSENBLATT, M.D.
- Radiologic
Seminar LVII 19 TOM B. DOMINICK, M.D.
- Clinicopathological
Conference
LXXXIV 20 Mississippi Baptist Hospital

EDITORIALS

- Doctor Draft:
Medical Manpower
Must Be Balanced 27 Flaws and Inequities
- The Pillmakers
Are Watching You! 32 Sneaky Electronic Eye
- Quackery, Inc. 32 Cultism Organizes
- They Think
Doctors Are Tops! 34 First in the Polls

THIS MONTH

- The President
Speaking 26 Postgraduate Education
- The Literature 41 New Books Reviewed
- Medical
Organization 45 News to the End of the Book

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

January 1967

Dear Doctor:

Pending issuance of a new simplified outpatient claim form, the old Dependents' Medical Care claim, DA Form 1863-2, may be used. Outpatient care additions to original Medicare include virtually all medically indicated services, whether rendered in home, office, or hospital outpatient department.

New service is subject to an annual deductible of \$50 per dependent with program then paying 80 per cent of charges. Not more than two deductibles for a total of \$100 are assessed against a military family during the July 1-June 30 fiscal year.

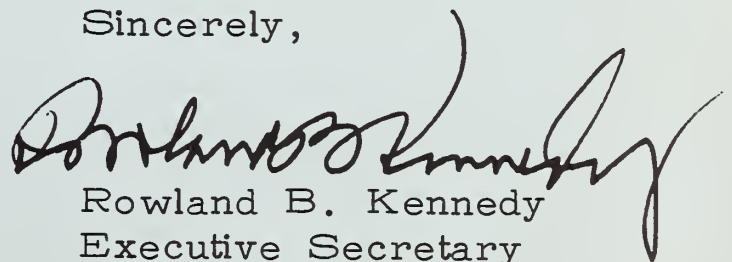
The Mississippi State Board of Health reports rendering family planning services to 12,900 women last year. Oral contraceptives have enjoyed wide acceptance with use of the pill mounting from 5,000 dispensed in 1962 up to more than 1.5 million last year. IUCD's are furnished by Board of Health to University Hospital. Program has been developed slowly because of divergence of public opinion.

Chiropractors are seeking millions of signatures on a petition to force the Congress to include their services as a benefit of Medicare. The cultists also boast that the petition "can (also) serve as a wedge to force state and national acceptance of chiropractic as a valuable and essential part of the nation's health care team."

There is proof positive that Americans over age 65 are taking advantage of Medicare by more frequent utilization of medical services. The National Disease and Therapeutic Index, respected statistical authority on private care, reports that of 109.2 million visits by private patients last October, 23.5 million were by patients over age 65. This is 22 per cent of all care rendered privately outside a hospital for the month.

AMA has branded use of anabolic steroids to make healthy athletes bigger and heavier as "a heartless hypocrisy." Dr. Thomas H. Hayes of AMA's Department of Drugs warns that actions of medicament is "infinitely subtle" and roundly condemned coaches who give them to athletes in sports where weight offers an advantage.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

Private Insurance Offerings To Seniors Increase

New York - The Health Insurance Institute says that at least 70 major U.S. insurance companies have offered a variety of 100 different hospital, medical, and income policies to those over 65 since the advent of Medicare. Many of the contracts cover the deductibles, but some offer weekly indemnity sums exceeding deductibles. Also available are contracts for those few seniors not eligible for Medicare. Included in new offerings are major medical coverages up to \$20,000.

Miltown Maker Seeks Exclusion From Drug Abuse Law

Washington - Attorneys for Carter-Wallace, Inc., developer of meprobamate, filed a brief with FDA stating that "the government has failed to prove that meprobamate has a substantial potential for significant abuse." FDA recently declared the drug subject to the Drug Abuse Control Amendments of 1965, the "anti-goofball" law. During the hearings, even the key government witness, Dr. Henry Brill, director of the world's largest psychiatric hospital, testified that meprobamate is only "occasionally misused." Since development of the agent in 1955, over 14 billion tablets have been dispensed on 500 million prescriptions.

North Mississippi Will Have Satellite Hospital

Tupelo - The North Mississippi Community Hospital, soon to be the largest in the state, has moved to expand services in its area with announcement that it will construct a satellite facility at Baldwyn. The new unit will function as an integral part of the Tupelo institution. Administrator E. L. King said the Baldwyn facility will have 35 beds and cost \$600,000.

Foreign Graduate House Officers Increase

Evanston, Ill. - The Association of American Medical Colleges reports that foreign medical graduates now occupy 24 per cent of all U.S. internships and 29 per cent of the residency positions. More than 11,400 now fill such posts. Since 1950, foreign-trained interns have increased to 2,300 from 700 and residents, to 9,000 from 1,350. AAMC also estimates that more than 4,000 foreign graduates are currently serving in fellowships and research programs. Hospitals not affiliated with a medical school use the greatest numbers of foreign trainees.

Allied Personnel Shortages Are Pinpointed

Washington - Dr. William H. Stewart, U.S. Surgeon General, says that the nation's hospitals need 20 per cent more allied professional and technical workers. Nurses are in shortest supply with urgent needs for 80,000 more RN's and 40,000 more LPN's. Also needed, Dr. Stewart feels, are 9,000 medical technologists, 4,000 physical therapists, and 7,000 medical social workers.



ORIGINAL PAPERS

Utilization Review Committees: Their Role and Function

MATTHEW MARSHALL, JR., M.D.
Pittsburgh, Pennsylvania

THE CONSTRUCTIVE PROBLEM facing medicine today is to make expenditures for health care effective under conditions which preserve the patient-physician relationship and professional control of health care standards. The underlying threat is excessive diversion of profits from industry into health care or other social welfare programs, whether privately or publicly financed, so as to significantly reduce the capital available for further industrial research and development. This in turn will support a higher standard of living and better health care facilities. Medicare increases this threat to the extent that funds available are not used effectively for health care.

In Pittsburgh, Pa., by August, 1967, when the steel plan covers virtually all expenses for care in the hospital and many services of physicians out of the hospital, socialized concepts of health care financing for the steel industry will be virtually complete in the sense that every steel worker will be able to afford the best of medical care with little or no out of pocket expense. Ordinary supply and demand economics will not be operative for we anticipate the demand will equal the supply of hospital beds and physicians.

We must deal with cost controls in a system with little incentive for economy on the part of

either provider or consumer, physician or patient. We must cease to engage in wishful thinking that significant, free economic factors naturally exist or will exist in this type of health care economics, nor can we expect the public to demand to pay

Measuring the effective use of the health care dollar is an extremely illusive thing to do, writes the author. But efforts to make the health care dollar more effective by planning or control must be accepted as a necessary but painful process, he maintains. The constructive problem facing medicine today is to make expenditures for health care effective under conditions which preserve the patient-physician relationship and professional control of health care standards, he states.

for health care expenses in the future except for those he can easily afford to purchase. This system will come to Mississippi like it will come to Pennsylvania and most physicians and hospitals will have no choice but to adapt to it.

Socialized medicine was said to be on the porch before Medicare, in the living room since Medicare, and on its way upstairs. Under such circumstances, it is to the advantage of physicians and the country as a whole, in my opinion, to have

President-elect, Allegheny County Medical Society.
Read before the Conference on Utilization Review,
Tupelo, Miss., Oct. 27, 1966.

the voluntary agencies performing as effectively as is needed in order to eliminate the demand for the government taking over any further health care functions. Under these circumstances, a defensive attitude would not seem to be warranted. To the contrary, we must aggressively seek to make the prepayment plans successful and give advice and active cooperation toward insuring their success.

As with claims control programs, professional utilization and review committee functions need to be an integral part of today's medical care system. Their role has been obscured because of a tendency to over-simplification. A currently popular truism is that the physician admits and discharges the patient, if only he will admit those patients who need to be in the hospital and send them home promptly, Medicare's or Blue Cross's problem will be resolved. This is partly true, but equally misleading, for social and economic factors have and will have a significant impact upon these decisions. Let me touch on several other misconceptions of short cuts to health care savings in order that you can consider our efforts more objectively:

THREE MISCONCEPTIONS

(1) Find a way to reduce the length of stay in the hospitals in area X from eight days to seven days. The cost of hospitalization in that area, therefore, will be reduced from \$8 to \$7 million. The error is that the last day in the hospital is usually the day the patient is least sick and, hence, is the cheapest day. Furthermore, since an empty bed costs three fourths as much as a full one to maintain, there will be no savings unless concurrent efforts are made to reduce the availability of the bed and its staff.

(2) Reduce the admission rate by providing prepaid outpatient diagnostic benefits. This is partly true, and a benefit strongly supported by the medical profession, but the housekeeping charge of patients undergoing intensive investigation are the least expensive factors. A better program, yes—less cost, hard to prove.

(3) Utilization committees. Every hospital staff should have a committee to control the individual physician's use of hospital beds and eliminate their misuse and excessive cost. This is partly true, but misuse does not appear to have a significant impact upon premium rates.

Long range planning of health care cost must take into consideration proven factors that influence hospital care. Increasing population by

number, age, education, affluence; the existence and type of health insurance; increasing the number of hospital beds and facilities, all tend to increase hospital use. Reducing the population density and the physician availability increase hospital bed use.

HOLDING THE COST LINE

What is to be done about the cost of a potentially insatiable demand for hospital beds and physician services? At \$35,000 to build a new hospital bed and \$12,000 a year to maintain it, and with many well-intentioned people always striving to increase availability and supply, what can be done to control this cost? It is thus apparent that long range planning will have a greater impact upon the ultimate cost of medical care than current claims control programs based on watch dogs or gimmicks even though their need is important and their effectiveness will have an ultimate impact upon long range planning.

The apparent solutions fall into two categories: Legislative restriction and regulation or voluntary community planning for health care services. If voluntary planning fails, there can be no other choice but legislative regulation.

In Western Pennsylvania, we have undertaken community planning for health care resources. I say "we" because there has been no activity undertaken that does not involve to some degree industry, hospital representatives, physicians, and competent staff. Motivation, cooperation, and expenditures for adequate staff are the first and most necessary requirement for planning. Such planning falls into two main categories: Health facility planning and planning for effective use of these resources.

PLANNING MEDICAL FACILITIES

There is, of course, overlapping and a need for cooperative relationships. Hospital planning in Western Pennsylvania comes under the direction of Robert Sigmond. He has a medical advisory group designated by our county society and reports to a board of directors composed of the industrial, physician, and church leaders in our area. He has encouraged every hospital to develop a continuing mechanism for intra- and inter-hospital planning in a way that assures participation of trustees, administration, and medical staff. It would be foolish for me to propose that such activity has gone on without some acrimony and differences of opinions inherent in the democratic process, but there is no construction on the books at the present time that does not have the approval

of this agency, and I believe that in the long run it will be more effective than compulsory planning. We must, indeed, convince the government that such planning at the local level needs its support rather than conversion into a government project.

All of this constitutes a rather long introduction to the subject, "The Need for and Function of Utilization Review Committees." Confusion regarding their function exists because of a somewhat dual role. On one hand, upon request, they have given consultation and advice to pre-payment agencies in their claim processing functions regarding the necessity of hospital admission or services. This may be done at the hospital level, or by physicians meeting jointly to discuss cases presented at a Blue Cross review function or to discuss the propriety of service or fees in the review structure that we have set up to meet the needs of either Blue Shield or the private insurance carriers and now Medicare.

EDUCATION FUNCTION

A more important but poorly publicized function of the utilization committee is its educational one because of its potential impact upon future use of hospital beds and facilities. It attempts to identify practices and procedures that could be more effectively or efficiently performed. It is not fundamentally a disciplinary committee but makes recommendations to the executive committee of the hospital or to the administration for action when indicated. It is the real keystone of our program, for physicians upon the staffs of the individual hospitals have the best knowledge and opportunity to assure the public that care in their hospital is rendered properly and efficiently. Through the joint efforts of the Medical Society and Hospital Organization, staff utilization committees were functioning actively throughout 85 per cent of the hospitals of Pennsylvania before Medicare. They supplement the work of other hospital committees already established to safeguard the patient's care.

Utilization committees function by either individual case selection review or pattern of care review. In the first instance, charts are selected where hospitalization appears to be unjustified or inefficiently handled by previously established criteria. They are reviewed and discussed by a committee composed of staff physicians. The findings are communicated to the attending physician. Inefficient patterns of care discovered by such a method are reported to the executive committee or administration. They may also study the patterns of care revealed by statistical analyses of diag-

nostic categories in their hospital compared to others or through an analysis prepared of their pattern of departmental use for example, of the operating room. Such studies are much more sophisticated and generally speaking, their preparation requires outside help, such as our Hospital Utilization Project.

HOSPITAL UTILIZATION PROJECT

The Hospital Utilization Project had its beginning in 1963 when we recognized that such outside staff activity was necessary. Until that time, all these activities had been on a completely voluntary basis, taking many hours of practicing physicians' own time, some of which was consumed in unproductive work. At that time, the project was developed and approved by the Medical Society and Hospital Council. The contributions to its budget have come primarily from industry. Other contributions have come from the Health Insurance Council and the Medical Society, none from Medicare or other federal funds. Blue Cross of Western Pennsylvania has made available its data processing equipment to supply this need for the project.

We have developed a permanent financing mechanism for 1967 through a per-hospital discharge charge. It is my understanding that several other states are developing similar projects. The staff has been active in helping to upgrade medical record libraries for a promptly and properly completed chart is needed as the basis for all reviews. Medical records had long been neglected but now have become extremely important. Considerable work was required and is required for improving the functioning of these departments. The project has developed a simplified system to automate the recording of key data from hospital charts and from this data has developed statistical analyses to assist committees. The most important, but least dramatic function, is personal assistance to help them have an effective utilization committee for this remains a time consuming, new and somewhat strange concept to both physicians and hospital administrators.

MEASURING SUCCESSES

How successful have we been? The impact of the Utilization Committee has been generally believed by medical staffs to have a profound influence for better medical records and more efficient medical care. It is less easy to document statistically. Shortening stays may reduce the average length of stay but eliminating short un-

UTILIZATION REVIEW / Marshall

necessary stays will tend to lengthen the average. Reduction of costly diagnostic tests may reduce cost but using hospitals for sicker people will tend to increase the average cost.

The recommendations of the utilization committees have sometimes been futile for hospital wage scales do not permit them to be competitive in hiring efficient personnel or encouraging week-end workers. Outpatient diagnostic benefits in pre-paid health care contracts are generally not sufficient to encourage out-patient diagnostic work-ups. The private insurance industry, many master Blue Cross contracts, and now Medicare do not make it possible to limit hospitalization to those paying patients actually in need of hospitalization for the diagnosis and treatment involved. It is not clear whether Medicare will have a really effective claims control program, for the public has little stomach for claims control unless it is guaranteed to effect somebody else. Utilization committees depend upon proper physician motivation. Morale cannot be maintained if obvious recommendations

cannot be implemented or if they are swamped by claims control activities and Medicare red tape. Physicians need the cooperation of industry and now Medicare and politicians to prevent misuse and overuse of Utilization Committees.

To close where I began on the theme of economics, what has been the impact of all this planning upon health care costs in Western Pennsylvania? Certainly it is not possible to separate the relative impact of each project. One basis of judgment are the hospital beds used by employees. A major steel producer found that in Western Pennsylvania this rate increased during the five year period from 1961-1964 inclusive by 3.2 per cent; whereas outside Western Pennsylvania, the rate increased 8.1 per cent. I hope, but am not sure, that this figure has significance. I do know that measuring the effective use of health care dollar is an extremely illusive thing to do and that efforts to make the health care dollar more effective by planning or control must be accepted as a necessary but painful process. ★★★

6004 Penn Ave. (15206)

PARALLEL PAROLEES

Two men met on the train as it was pulling out of the station at Jackson. Said the first: "I just got out of Parchman state penitentiary this morning, and it's going to be tough to go home and face old friends."

"Yes, I know exactly how you feel," replied the second. "I am a state senator, and the legislature has just adjourned."

Coronary Heart Disease

WILLIAM H. ROSENBLATT, M.D.

Jackson, Mississippi

BY WAY OF A BRIEF REVIEW of coronary heart disease, there are only two small arteries upon which life depends, the left and right coronary arteries. Interference with flow of blood in these vessels can impair the entire function of the myocardium, the basic disease process affecting the coronary arteries being atherosclerosis.

In the normal anatomy of the coronary artery, or actually in any artery as in this cross section, one sees the very smooth lining or intima covering the entire inner surface of the artery. This is surrounded by a middle layer or media, and the adventitia, or the surrounding supporting layer. Figure 1 is a perfectly normal coronary artery capable of handling an adequate flow of blood through it.

Figure 2 is a coronary artery diseased by the atherosclerotic process which is represented here by a pinkish staining atheromatous material made up of blood fats and calcium salts in the form of hyaline and cholesterol with darker staining calcium deposits. There is narrowing of the lumen of the coronary artery down roughly 25 per cent of normal. Note the canalized area of the atherosclerotic process. The intima has been completely destroyed by the atherosclerotic process, and the lumen has been markedly encroached upon by the process to the extent that the coronary flow is severely compromised.

Figure 3 represents normal heart muscle with the myocardium presenting a marbled appearance by healthy heart muscle. This merely demonstrates heart muscle which is supplied by normal coronary arteries similar to the one shown in the first figure.

Figure 4 is a section of myocardium that has

been supplied by a coronary artery similar to that seen in Figure 2. The normal pattern of the heart muscle is no longer shown, and there are areas of diffuse scarring. The marbled effect demonstrated on the original slide has disappeared. The slide represents areas of myocardial fibrosis secondary to old myocardial infarctions or areas of myocardium that have been supplied by arteries which

There are only two small arteries upon which life depends, the left and right coronary arteries. Interference with flow of blood in these vessels can impair the entire function of the myocardium, the basic disease process affecting the coronary arteries being atherosclerosis. Clinical coronary heart disease results when the total blood supply to the myocardium via the coronary arteries is inadequate to meet the myocardial demands. Symptoms, diagnosis and management are discussed.

were markedly encroached upon by the atherosclerotic process.

Figure 5 illustrates changes similar to those seen in Figure 4, but showing more extensive scarring of the myocardium. The marbling effect is again lost.

The cause of atherosclerosis is entirely unknown, and there is no way to halt its progression once it becomes manifest clinically. There has been much speculation as to the etiology of atherosclerosis, including that of stresses of civilization. That is, the theory that in some unexplained manner, the tensions that we are subject to are thought to induce certain biochemical or physical changes which result in atherosclerosis. This may

Adapted from a postgraduate symposium conducted by the author at the University Medical Center, Jackson. Questions and discussion are by the symposium participants.

CORONARY DISEASE / Rosenblatt

explain the high incidence of the disease in the United States and the low rate in primitive or less competitive countries.

However, there are those who believe that this difference is better explained by the variations in diet with special reference to animal fats. That is, the richer the country, the greater the saturated fatty acid consumption, and the higher serum cholesterol levels. The believers in this theory cite that the normal cholesterol level in the United States may be 200 to 250 mg. per cent, whereas in those countries where the disease is infrequent, comparable levels are only 100 to 150 mg. per cent. Further supporting evidence of this belief is the reported decrease in deaths due to coronary heart disease during World War II in countries where animal fats became scarce, followed by a prompt increase in the rate once the economy improved, and animal fats became available.

THEORIES NOT PROVED

These theories are still unproven. The same epidemiologic results could be compared to the number of automobiles, or telephones during



Figure 1

World War II and after World War II. The most substantial evidence regarding atherosclerosis in coronary heart disease might be that of patients for example with diabetes, who have four times as

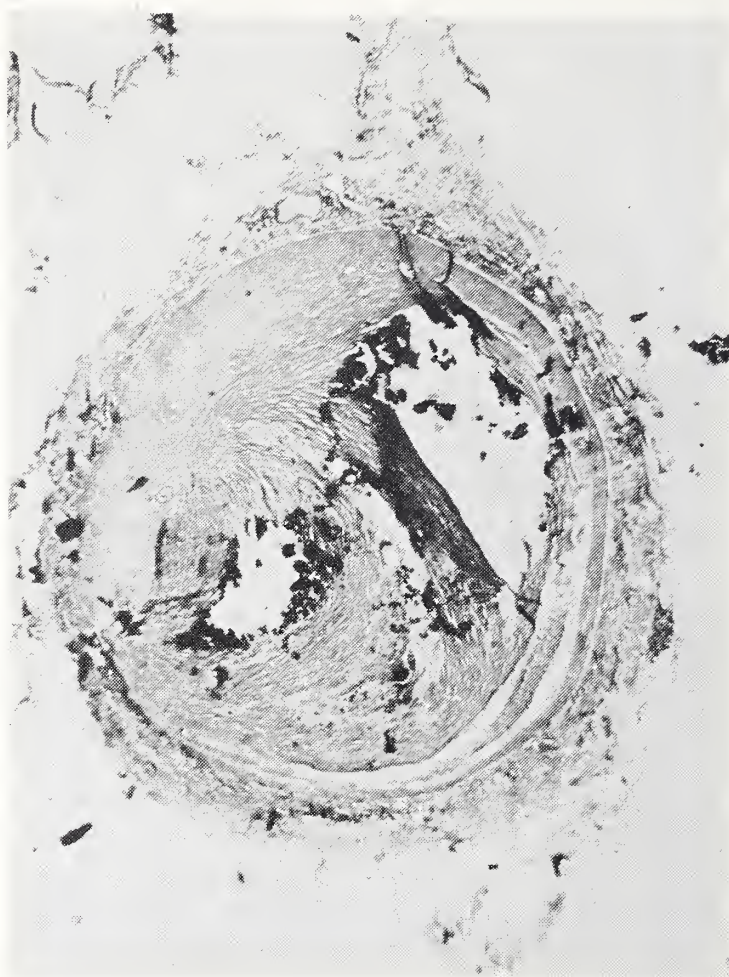


Figure 2

much coronary disease as non-diabetics. One might also consider the sex difference in connection with instances of atherosclerosis. It is well known that coronary heart disease is distinctly uncommon in women during the childbearing age. This allows speculation as to hormonal influence.

CORONARY PATIENT SIMILARITIES

Actually, there is a series of factors that are common in most patients with coronary heart disease. These factors can be listed as follows: family history, history of hypertension, exceedingly high levels of serum cholesterol, in gout patients, obese patients, individuals who smoke excessively, the muscular, squatty, square type of person, or individuals who lead sedentary existences.

Regarding family history, we have all at one time or another had a patient present with chest pain suspected coronary heart disease, who has

one or two siblings with coronary heart disease, one perhaps with myocardial infarction, and another with angina pectoris. He may also have a mother with angina pectoris, and a father who died at an early age of acute myocardial infarction. It is then quite likely that this individual with chest pain does indeed have clinical coronary heart disease in spite of the fact that all of the usual testing procedures are normal.

HYPERTENSION FACTOR

Individuals with high blood pressure are more prone to have coronary heart disease; on the other hand, we find a majority of patients with acute myocardial infarction who are normotensive. Nevertheless, we cannot escape the fact that people with high blood pressure do have a propensity to develop atherosclerosis of the coronary arteries at an earlier time in their lives than individuals who are normotensive. When evaluating



Figure 3

persons with gout, one ought to look for evidence of coronary heart disease, and with reverse reasoning, an individual with coronary heart disease should have his serum uric acid checked because we frequently find an association between gout and coronary heart disease. There is no evidence

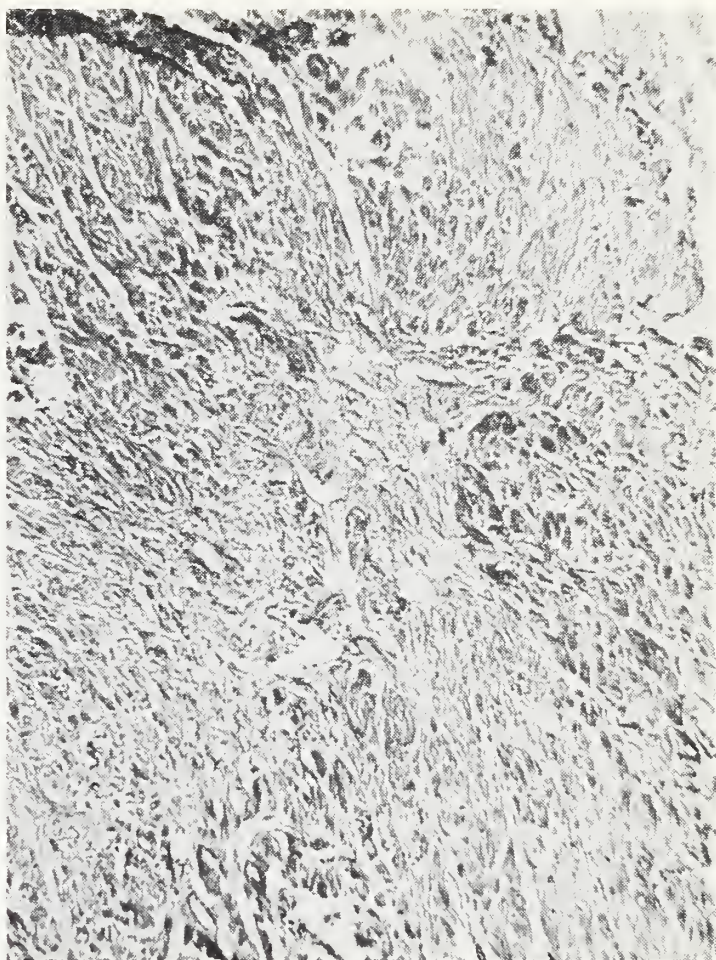


Figure 4

that any of these factors cause coronary heart disease. However, individuals who do have these conditions are certainly high-risk candidates.

If the degree of obstruction in the coronary arteries is minimal, and does not significantly reduce the blood supply to the myocardium, then the disease will be asymptomatic and unsuspected. Asymptomatic coronary heart disease merely depicts grossly narrowed coronary arteries. However, the collateral circulation may be adequate to maintain substantial blood flow and no symptoms are recorded.

DISEASE PROCESS

Clinical coronary heart disease results when the total blood supply to the myocardium via the coronary arteries is inadequate to meet the myocardial demands. The first clinically recognized type of coronary heart disease would fall into the category of angina pectoris which is a syndrome characterized by retrosternal discomfort, ranging from mild pressure in the retrosternal area with radiation into the neck or into the jaws and down the arms to severe crushing pain brought on by exertion or emotional upset, lasting three to five minutes. This generally clears when the exertion stops or when the emotional upheaval stops, and

is relieved by rest or by the use of sublingual nitroglycerin. If the chest pain persists beyond this period, then this is no longer angina pectoris, but so-called intermediate angina or pre-infarction angina which is the forerunner of infarction of the myocardium. We also refer to this set of circumstances as acute coronary artery insufficiency.

The final insult from coronary artery atherosclerosis is the actual obstruction of one of the main coronary arteries or branches by one of the following conditions: (1) a clot formation—a coronary thrombosis, (2) bleeding beneath a plaque in the thickened endocardium, (3) occlusion of a coronary artery by subintimal bleeding with encroachment on the coronary channel and blocking off of the coronary artery, (4) a progressive occlusion of an artery merely by the atherosclerotic process itself without a clot forming, and (5) a myocardial infarction without a clot formation, and without occlusion of a coronary artery, precipitated by a discrepancy between the blood supply to the heart muscle and the demands placed upon the coronary circulation by increased work of the heart muscle.

PATIENT DISCOMFORT

Individuals with acute myocardial infarction will typically describe discomfort in the retrosternal area. This may be mild, severe, of an aching type, burning, squeezing or crushing type, and occurs at rest usually. The majority of individuals with acute myocardial infarctions suffer myocardial infarctions at rest. These is only a small percentage of individuals who develop acute myocardial infarctions following mild to moderate exertion, and only about one or two per cent of individuals with acute myocardial infarction develop the infarction after extreme exertion.

The pain or discomfort of myocardial infarction is continuous. It may last up to an hour, or sometimes 12 to 24 hours, or even longer. It may be intermittent and recur for a week or two before there is documented evidence of the infarction by customary means of detection. This pain is usually not relieved by nitroglycerin. There may be an accompanying drenching sweat with nausea and vomiting. There may be severe shortness of breath and marked weakness. These are the usual symptoms elicited from patients with acute myocardial infarction; the symptoms and findings that we were taught in medical school. One should be cognizant of the fact that there are variants in the symptoms of acute myocardial infarction, such as

pain in the neck without chest pain, or pain in the arms.

Most of us can recall an isolated case or two where an individual presented with pain in an elbow and no chest pain whatsoever. In other words, pain somewhere other than in the chest can still represent the pain of myocardial infarction. Pain may even be entirely absent in acute myocardial infarction, and the only presenting symptom is sudden collapse. This is the so-called "silent infarction." The electrocardiogram, however, demonstrates evidence of myocardial infarction. "Silent" infarctions occur in about 10 per cent of all acute myocardial infarction patients.

EPISODES WITHOUT PAIN

There is also a group of myocardial infarction patients found at the time of surgery, who suddenly develop hypotensive episodes, or even shock. These patients are under anesthesia and cannot complain of chest pain, and only by careful investigation electrocardiographically, can evidence of myocardial infarction be found. We have all found individuals who come in for routine evaluations, who on electrocardiographic examination show evidence of an old healed myocardial infarction, without their recalling ever having had

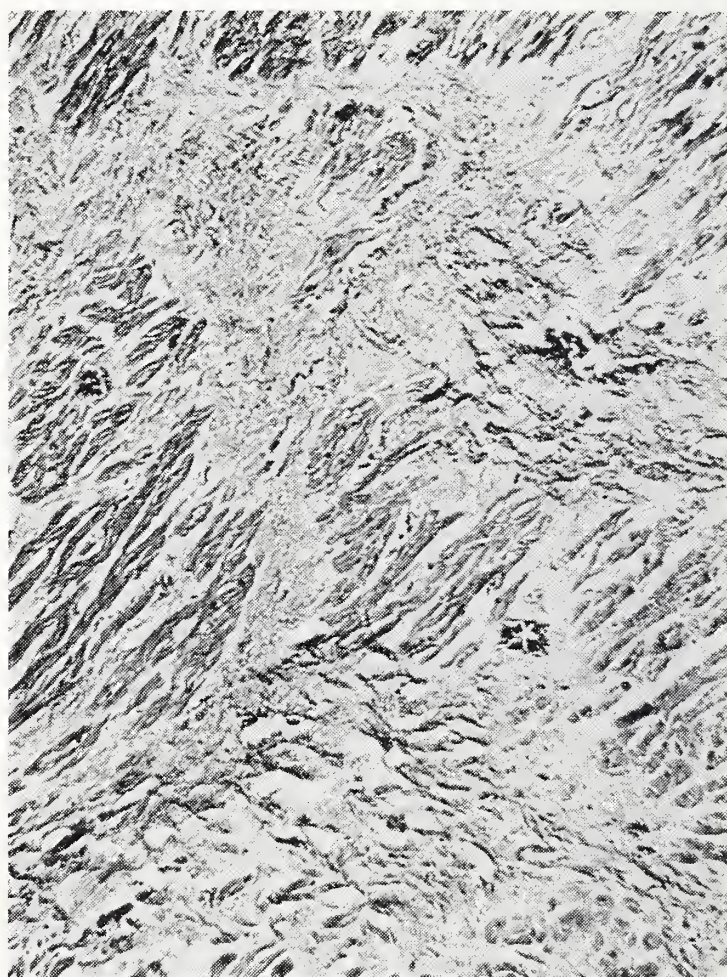


Figure 5

any chest pain or symptoms of myocardial infarction. This reflects the wide area of symptomatology, from typical through atypical, to no symptoms at all.

One might ask, what are the physical findings? An individual with a mild myocardial infarction may be found to be perfectly normal on physical examination. The blood pressure may be normal, the heart sounds are good, the lungs are clear, and no signs of failure are elicited. For all purposes then, the physical examination presents no abnormalities whatsoever. On the other hand, in moderate infarctions or severe infarctions the blood pressure during pain may be markedly elevated, and if the infarction is massive, the individual may have a marked hypotension, or may be in shock as manifested by the typical cold, clammy skin with a rapid, thready pulse.

The patient will have an apprehensive appearance, and cloudy sensorium. The heart sounds are of poor quality. There may be a tic-tac rhythm, and the rate is usually rapid. On the other hand, the rate may be extremely slow reflecting a bradycardia, making one immediately suspicious of a block of the right coronary artery with posterior wall myocardial infarction. The right coronary artery supplies the AV node in about 88 per cent of cases, and with obstruction or occlusion of the right coronary artery interference with the conduction through the AV node may occur producing distant heart sounds. If the block is complete, there will be an extremely slow rate, perhaps 30 to 40/minute with even more faint heart sounds.

IMPORTANT LAB TESTS

It is well known that the WBC goes up in myocardial infarction, and the sedimentation rate is accelerated beyond 20 mm. per hour. However, these are quite non-specific tests, and simply reflect the presence of inflammation or tissue destruction. The white blood count, for example, is elevated frequently within hours after an attack, and may be the only clue in the absence of abnormal electrocardiographic changes. The sedimentation rate may not be elevated for 24 to 48 hours following acute myocardial infarction.

Two more important tests in the detection of myocardial infarction are the serum glutamic oxaloacetic transaminase or SGOT and the lactic dehydrogenase or LDH, the SGOT reflecting the level of that serum enzyme which is normally present in muscle, whether it be heart muscle or skeletal muscle. Normally, the level of the SGOT enzyme in the blood stream is in the neighborhood of 30 to 40 units, the level of the LDH, 250 to

275 units. When there is destruction of muscle, myocardial or skeletal muscle, there usually will be an elevation in the levels of the SGOT and LDH. In other words, if an individual presents with acute chest pain, and the usual tests are negative for myocardial infarction, these additional tests are necessary. If the SGOT level is elevated or becomes so within the first 24 to 48 hours following acute infarction, then one is secure in the impression of myocardial infarction.

However, given an individual who has been in an automobile accident sustaining a crushing chest injury, the SGOT would be of little value because of the large volume of muscle damage and electrocardiographic changes would be of more value in establishing a diagnosis of infarction or contusion of the myocardium than serum enzyme levels. The SGOT rise may be 50 to 60 units up to 500 to 1000 units, depending upon the area and the amount of heart muscle destruction that has occurred from the infarction.

SGOT VALUES

The higher SGOT levels, those around 300 units or more are associated with highest mortality rate, and these levels, therefore, can be used prognostically so far as telling the patient's family just how bad the infarction is. It must be remembered, however, that there are other diseases that can cause rises in the SGOT level. It should also be pointed out that the very drugs used to treat shock in acute myocardial infarction may cause a rise in the SGOT levels. Even shock can cause a rise. With a persistent elevation of 700 units to 800 units over a period of four to five days, one must consider some other cause for the rise. Liver disease is most often the villain in these cases. Certain malignancies, lymphomas, cancers, and leukemias may cause a rise in the SGOT.

The LDH determination behaves in a similar manner to the SGOT except that the rise in the LDH levels will usually take place about four or five days following the infarction. Therefore, in an individual presenting with symptoms suspicious of myocardial infarction four or five days earlier, the SGOT determination might be normal, and in such a case one would want to get the LDH determinations. If the levels run at 250 or above with electrocardiographic evidence of myocardial infarction, the diagnosis is secure.

It should be fully appreciated that the diagnosis of acute myocardial infarction must never be made entirely on the basis of the laboratory studies. The value of these tests is only supplemental. Conversely, negative results should not be grounds to

question the diagnosis of myocardial infarction in the presence of typical history and characteristic electrocardiographic findings. ★★★

QUESTIONS AND ANSWERS

Dr. John Murphy: "If you get a patient within hours of an acute attack, is there any reason to get both the SGOT and the LDH?"

Answer: "No. Actually, to get an LDH within a matter of a few hours following the acute onset of the attack, or even 24 to 48 hours, would be worthless, because a rise will not take place until about three or four days following the attack."

Dr. Murphy: "If you have typical findings with your SGOT, then there is no need later to get the LDH?"

Answer: "Absolutely not."

Dr. Robert Smith: "In the case of the patient Dr. Murphy mentioned, if you had ordered an LDH when you first saw the patient, as a point of comparison, is the fact that this was a normal LDH when you first saw the patient, and is now 72 hours later 300, significant?"

Answer: "This would be significant. But again, you would have to consider that rise in the face of the electrocardiographic findings, and also the SGOT levels. The LDH really won't be nearly as striking as the SGOT determination. I lean more on the SGOT determination. I have a lot more faith in that than I do in the LDH."

HIGH RISK CANDIDATE

Dr. Wally Conerly: "On this discussion of atherosclerosis, take an individual like I saw today for instance, who is in this late thirties, not really obese, but a stocky individual, blood pressure of 160/100, without the knowledge of how long this has been present. How much trouble would you surmise this man probably has at this point?"

Answer: "With the body build that you describe, the blood pressure elevation, and I would assume that you looked in his eyegrounds and saw probably grade I or II changes, or maybe even normal eyegrounds, the entire examination otherwise being normal, the electrocardiogram normal, and in all probability no chest pain at all, no symptoms that might be ascribed to coronary heart disease, and you did not do a Masters two-step test on him, I would say that he would be a high risk candidate for coronary heart disease because of his hypertension. I would get a serum cholesterol level even though I don't have too

much confidence in this, but if the level would be say in the neighborhood of 450 to 500, then I would wonder, 'where do I go from here.' There are no drugs that we have now that can safely lower the serum cholesterol. We could possibly attempt to get his body weight down.

"However, the number one thing that I would do would be to attempt to make him a normotensive individual. I think that that would be about the only thing that we could probably offer him besides the weight reduction. The chances are that an individual like this comes from a family that is similarly built, has a high incidence of coronary heart disease, strokes, or other vascular disease. All you could really offer such a person would be control of his hypertension. If he smoked heavily, you should encourage him to quit.

MALIGNANT HYPERTENSION

"Then we wonder about other things. For example, back in 1953, Perera wrote an article in *Circulation* dealing with individuals with accelerated or malignant hypertension who had normal blood pressures for one reason or another, either they were treated surgically with sympathectomies, or they had had strokes or myocardial infarctions or went into congestive heart failure and became normotensive. The atherosclerotic process continued on its merry way and took its toll in spite of normal blood pressure readings. You have to offer these people something, give them a little hope, but we really don't know all the answers."

Dr. Joe McGehee: "With respect to these sudden deaths where there has been absolutely no complaint of any sort except maybe they are overweight and known hypertensives, exactly what happens anatomically when they just sort of slump over and die right in the middle of a conversation with no warning whatever, and no apparent pain or dyspnea either?"

Answer: "That's an excellent question, and I can hardly wait to get to that aspect of this seminar when we talk about the management of the acute stage of myocardial infarction. I am not going to duck your question either because what you are pointing out are 'mechanism deaths.' In other words, people who die within the first 48 hours of an acute myocardial infarction. People who die even before they get to the hospital, or before they get to your office. These are folks who develop arrhythmias, usually ventricular tachycardia, or ventricular fibrillation or flutter, or cardiac arrest.

"These arrhythmias are usually primary, and when we talk about primary arrhythmias versus secondary arrhythmias, we imply that the primary

arrhythmias are those that develop from irritable foci in the myocardium. For example, frequent premature ventricular contractions, more than six per minute, going into runs of ventricular tachycardia and ventricular fibrillation as contrasted to individuals with severe myocardial infarction with shock, with a tremendous drop in blood pressure, the arrhythmias developing secondary to the shock, rather than to primary irritability in the myocardium.

"What we are really talking about here are the instantaneous deaths in acute myocardial infarction. These are people that can be saved if they are in an area of the hospital that has intensive care facilities, where one can diagnose these arrhythmias and treat them appropriately with drugs or DC countershock. If an idioventricular rhythm is present, an external pacemaker may be used, or if there is complete AV heart block, an internal pacemaker through the jugular vein can be inserted until an implanted pacemaker can be placed. Does this answer your question?"

Dr. Conerly: "I think it helped a great deal. I just had a patient to go suddenly like that. He had a habit of getting up in the middle of the night, sitting in a chair beside the bed. He was very overweight and had been what I would consider extremely hypertensive and wouldn't slow down at all. A few nights ago he got up and was sitting talking to his wife, and in a moment she noticed that he wasn't talking and appeared to be asleep. She knew that he just didn't go to sleep that rapidly when sitting up talking. Apparently he was in the throes of death and was taking a last gasp when she thought he was snoring perhaps."

MECHANISM DEATH

Dr. Rosenblatt: "This, I am sure, was a mechanism death. Now along that line of reasoning, given an individual with known coronary heart disease, who is firing off premature ventricular contractions, I think that you better be on guard for potential ventricular tachycardia or fibrillation, and put that patient on quinidine. Now when we get into this area, we could really take off, because this is what a group of us have been working on now for the past year.

"Blood levels of procainamide and quinidine are most important with respect to adequate dosages of these agents. If I were to ask each one of you here, 'What dose of quinidine would you give a patient, assuming that he had a supraventricular tachycardia, i.e. atrial fibrillation with a rapid ventricular rate or atrial flutter?', you would probably say that you would put him on 0.2 gm.

every two hours for five doses, and then drop off to a maintenance dose. Now, this will apply to a majority of individuals who are under 150 pounds of body weight. When one gets above 150 pounds in body weight, that same dose may not be adequate. In order to be effective with quinidine dosage, you will have to maintain a blood level above four mg. per liter, and if you have an individual let's say that weighs 200 pounds and you give him 0.2 gm. of quinidine every six hours, you may as well give him a dose of a placebo.

QUINIDINE THERAPY

"You have to load these people with quinidine initially. If I were treating an individual who weighs around 200 pounds, for example, with quinidine because of frequent premature contractions in the presence of acute myocardial infarction, I would load him with a dose of 0.4 gm. or six grains of quinidine as a starting dose, and then give 0.3 gm. every three hours for four or five doses, and then drop down to 0.3 gm. every six hours and get blood quinidine levels. What I am saying is that in the presence of coronary heart disease, and in the presence of ventricular ectopic rhythms, you had better treat these people effectively because these are the ones that die suddenly from mechanism deaths.

"You may ask about Pronestyl. In our experience, Pronestyl orally has been disappointing. Here again we are dealing with a pharmaceutical firm's recommended dosages. If I were to ask anyone of you around the table, 'What is the ordinary dose of Pronestyl?', you would probably tell me 250 mg. every six hours. Actually, you won't get much of a blood level with this dosage. We are running blood levels on Pronestyl-treated patients and believe that effective levels are associated with body weight much like quinidine levels. In order to get an adequate blood level with Pronestyl orally, one has to give 500 mg. every four hours, and in extremely heavy people, more than that, 750 mg. every four hours.

"This does not apply to Pronestyl given intravenously or intramuscularly, since this drug is effective by this route, but not so much so orally. If you have a choice, in people who can tolerate quinidine, who have ventricular ectopic beats, then I would recommend that quinidine be given. Here again, I would like to impress upon you the importance of body weight. We have not yet published this, but will in the near future. When you have a patient who is overweight and you elect to give him quinidine, please give him more, probably twice what you would normally give a person if you expect to abolish the arrhythmia."

CORONARY DISEASE / Rosenblatt

Dr. Elmo Walker: "How would you handle a person who has high phospholipids, so much so that it makes the serum turbid?"

Answer: "I recall a study in 1952 on patients who had angina pectoris post-prandially, getting typical symptoms of angina pectoris after eating a meal. These people presented turbid plasma with markedly elevated serum triglyceride levels and responded quite well to heparin given intravenously, 100 mg. every six hours in the hospital, and on an out-patient basis, 100 mg. every 12 hours subcutaneously over the posterior iliac crest. If you give an individual with an elevated serum triglyceride level and post-prandially turbid plasma a dose of 50 or 100 mg. of aqueous heparin intravenously, and then draw a specimen of the blood two hours later you will find almost complete clearing of the plasma. If you merely add heparin to the turbid plasma, nothing happens. Beyond this, I know of nothing to help this sort of patient."

Dr. Elmo Walker: "Are there any long-term methods for this? Say dietary?"

Answer: "No. All you can hope to do is keep the body weight down. This individual may very well be a very trim and slender individual who happens to have a family history of this metabolic defects. You can't control it by diet, and we don't have any drugs presently other than heparin, which certainly is worth a try. You can train the patients, a member of the family, or a friend, to administer the heparin."

Dr. Cyril A. Walwyn: "What about those asymptomatic cases who perhaps collapse or die before you realize that they are really sick people, those who seem to do well, but die. How can you detect this in time to help them?"

INVESTIGATION BY MILITARY

Answer: "There is really no way in the world of doing this. You are probably familiar with Enos's work on servicemen in Korea in 1952 or 1953 where they autopsied some 200 of these American soldiers in their late teens and early twenties who were killed in action or automobile mishaps, but did not die of coronary disease. They found that 77.4 per cent of these young people had significant coronary heart disease. You can't detect this without symptoms or abnormal physical or electrocardiographic findings. The interesting thing about it is that roughly 30 per cent of individuals with acute myocardial infarction die before you can get to see them, before you can get them into the emergency room, before they get to your office, or before you can get to their homes. You can't save

those people, but you can, if you cut that population off and take the infarctions that get to you as you will see when we get to this later in our seminar, reduce the 21 day mortality rate of acute myocardial infarction by 50 per cent by early intensive care. That is, monitoring for a period of three or four days and being ready to treat whatever complications may arise, particularly arrhythmias which account for half of the deaths in the initial 48 hour period."

Dr. Walwyn: "Let us take in particular young athletes who you hear drop out of training and die. It seems to me that in the physical examination it might be possible to pick up some sign."

CORONARY ARTERIOGRAPHY

Dr. Rosenblatt: "No, the only test that I know of would be coronary arteriography, and I would hate to subject every individual from the time he was born annually to coronary arteriography."

Dr. Walwyn: "What I mean to say is, do you think it is likely that a young strapping fellow who had been in practice day after day would just drop off and die suddenly without something to detect?"

Dr. Rosenblatt: "We see it. So far as detection and insurance against this disease is concerned, the best insurance would be to properly select your ancestors."

Dr. B. F. Banahan: "If you've mentioned ballistocardiographs, I've missed it. Where do we stand with ballistocardiography?"

Answer: "I think ballistocardiography is certainly worthwhile. I think it is a valuable test in individuals who are under the age of 40, who may or may not have symptoms of coronary heart disease, in whom all tests including electrocardiograms are perfectly normal, with normal physical examination; an abnormal ballistocardiogram might be significant. This would place you on the alert because an individual under the age of 40 with a perfectly normal coronary circulation should have a normal ballistocardiogram. After the age of 40 when we usually have some degree of atherosclerosis in our coronary arteries, the yield of normals is quite small. If you are over 40, and you have a normal ballistocardiogram, I think that is encouraging."

Dr. McGehee: "Would it be amiss to mention a couple of these things such as nitroglycerin, Isordil and Peritrate with respect to comparison? I have read recently that nitroglycerin isn't worth the room it takes up."

Answer: "Not at all. There are always those who for some reason or another like to be iconoclasts. They just want to tear down age-old tried

remedies. Nitroglycerin has stood the test of time. I'll grant you that there has been some discussion about how actually nitroglycerin works, and we still don't know whether it acts by peripheral vasodilatation with a decreased return to the right side of the heart, or whether it actually dilates the coronary arteries like the old time doctors said it did.

"Dr. Mason Sones has done some beautiful work in this field with coronary cinearteriography where he has used nitroglycerin and Isordil and shown where before these drugs were given that the coronary arteries had a decreased caliber, and after the drugs were given, the caliber had markedly increased. Now you can't just toss that out the window. I think that these drugs do have value. I would like to add that I am beginning to get a little skeptical about some of the other long acting preparations."

Dr. McGehee: "With respect to the long-acting preparations, I have had patients get a terrific headache on it so they must be absorbing it. It may be possible that, like other pharmaceutical setups, the tablet itself does pass, yet the drug is released."

Dr. McGehee: "What effect does influenza have on the heart?"

Answer: "This is an excellent question. I think any viral infection is potentially able to damage

the myocardium. Viral myocarditis is not at all uncommon, and we used to laugh at the old time practitioners when they made a diagnosis of myocarditis. The pendulum is swinging back now. In individuals who have febrile illness of a viral type, I think it is wise to look into the possibility of myocardial derangement with electrocardiograms."

Dr. McGehee: "This may be beside the point, but I treated a 37-year-old female with a temperature of 104 plus, with a few scattered rales, and with no way to rule out or in anything. The next day the temperature was almost normal. She was given another injection of penicillin and was asked to come back if she didn't feel well. Six days later she dropped dead."

Dr. Rosenblatt: "This was probably a case of myocarditis."

Dr. McGehee: "However, you can't tell these people that they should take it easy until they feel perfectly strong—they won't listen."

Dr. Rosenblatt: "I think this. You who see these people with obvious viral infection are in an excellent position to run cardiograms conveniently. If there is evidence of myocarditis, bedrest should be insisted upon until the electrocardiograms become normal and the patient is free of symptoms." ★★★

1151 N. State St. (39201)

SUITABLE SEQUELA

The young boy watched, anxiously and nervously, as his father changed into his tuxedo. Unable to maintain his silence any longer, the boy said: "Please don't wear that suit, daddy. It always gives you a headache the next day."

The Use of Intra-Uterine Devices In Sunflower County

THOMAS STANLEY MARTIN, M.D.
Hattiesburg, Mississippi

SUNFLOWER COUNTY Health Department was the first in Mississippi to undertake widespread use of intra-uterine devices. Earlier, Hinds County participated in a controlled study by Dr. Kenneth Pittman of Jackson, one of the state's pioneers in the use of IUD's.

The use of intra-uterine devices within the Family Planning Program of the Sunflower County Health Department was initiated under the direction of Dr. Walter Rose in April 1965. Dr. Pittman was instrumental in both inspiring this phase of the program and in giving initial instructions to physicians of the county.

The IUD was included with enthusiasm in the program of birth control. The public health nurses, the backbone of public health, were quick to offer this method of contraception to the postpartum patients and to other likely candidates. The acceptance was mixed. The inevitable frustrations of any new undertaking were present. Nevertheless, lessons were learned, obstacles were overcome, and the program gained impetus.

From the beginning, few candidates have been disqualified. Those excluded have been the nulliparous, those with uterine fibroids or developmental abnormalities, those with acute pelvic inflammatory disease, recent menstrual disorders, or suspected malignancy. Insertion is always accomplished near the completion of a menstrual period, never at the end of a cycle.

Three types of devices have been used, the

Birnberg bow, Margulies spiral (or the Gynecoil), and, most successfully, the size D Lippes loop.

Little equipment is necessary. The intra-uterine devices, and applicators remain in a solution of 1:750 aqueous zephiran at least 24 hours prior to insertion. A tentaculum is rarely used. Sterile gloves and paraphernalia for a simulated sterile prep are included in the set-up.

The Sunflower County Health Department was the first in Mississippi to undertake widespread use of intra-uterine devices. This is a report on the patient selection, methods and procedure, and success of the program.

At the beginning of a procedure, an applicator is loaded with a loop using sterile technique. A pelvic examination is then made to determine the size, shape, and position of the uterus. After the cervix and vagina have been prepped, the applicator is gently inserted into the cervical canal and guided in the proper direction until the hub of the applicator is flush with the cervical os. Dilatation has never been necessary in my own experience, although patience has often been required in the awaiting of the relaxation of the internal os. The plunger is then slowly driven home, emitting the loop into the uterine cavity, where it returns to its original shape. The long suture is generally clipped, either before or (usually) after insertion. The patient is then given an instruction sheet and told to return in one month for a check-up. The instruction sheet explains about the probability of spotting for several days, and of the possibility of

Director of Student Health Services, University of Southern Mississippi.

Read before the 85th Semi-Annual Meeting, Delta Medical Society, Greenwood, April 13, 1966.

At the time of authorship, Dr. Martin was director of the Sunflower County Health Department.

occasional cramps. It also describes self-examination to insure against unrecognized expulsion.

In our experience with 150 cases, we have found that our statistics are in general agreement with those of accumulated studies. Expulsion rate with size D loop at present is reported at 6.9 per cent; we have had a somewhat lower rate. Expulsion of other types of devices and of smaller loops has been reported at a significantly higher rate.

We removed 21 devices, 13.5 per cent. It is reported that 15 per cent of loops and even more of the other types, are unacceptable to the patients. To our present knowledge, none of our patients has become pregnant while a device was in place. The literature reports a rate of 1.2 per cent. Following removal or expulsion, two of our patients have become pregnant. In a study by Dr. Jack Lippes, 100 per cent of those patients desiring pregnancy became pregnant within three to nine months subsequent to removal.

SIDE EFFECTS

Our total side effects, minor and major, have numbered 43, or 28 per cent of the insertions. The literature reports that 37 per cent can be expected. These side effects are manifest chiefly as bleeding problems (from spotting to menorrhagia) and as pain (generally mild cramps), more frequent in the early weeks. Controlled studies indicate that 20.8 per cent may experience bleeding problems; about 10 per cent experience pain.

As can be imagined, varied psychological complaints have been made. Rarely complaints of the husband are reported to us. However, the gynecoil has been frequently condemned for causing trauma to the male partner.

SUNFLOWER COUNTY
150 CASES

18 COIL 3 BOW 129 LOOP		
Expulsions (5)	3.5%	6.9%
Removals (21)	13.5%	15 %
Pregnancy		
Device in situ (0)	0 %	1.2%
Pregnancy		
Following removal		
or expulsion (2)	(32) Lippes	100 %
Total Side Effects (43) ..	28 %	37 %

Infections have been surprisingly low, both in the literature and in our experience. When pelvic inflammatory disease is discovered, the IUD is usually left in place and antibiotic therapy administered.

The 150 cases of the first year fall short of the number anticipated at the enthusiastic beginning. Nevertheless, present indications are that the trend is for wider acceptance throughout the county, and we anticipate 400 new cases this year.

SUNFLOWER COUNTY
SIDE EFFECTS

		Literature Average
Bleeding	11 %	20.8%
Pain	9.3%	9.7%
Psychological	6.7%	
Complaints of Husband	0.6%	0.2%
Infection	2.6%	1.0%

Although birth rate statistics at this point are essentially meaningless, it is at least interesting to note that the birth rate in Sunflower County has fallen in five years from 30.8 to 25.3. In the non-white population it has fallen from 37.5 to 31.3. It is also interesting to note the birth rate in Japan was 34.2 in 1947, while now it is down to 15.0.

In a discussion of the IUD's it should be stated that, like all else, they are not really new. Silk devices were made and used in Hinds County, Mississippi, in World War II. The Grafenberg ring made its appearance 30 years ago. However, interest was revived only recently with the first published papers in 1959. Such rapid enthusiasm ensued that in October 1964, there were reported more than 100,000 devices in use, principally in Korea, Taiwan, Chile, Pakistan, Hong Kong, India, and others. Eighteen months later, how many are in use is just a guess. An interesting innovation here in the United States is that at several large metropolitan hospitals, like the John Gaston, the loop is sewn in place at time of delivery.

IUD SAFETY FACTOR

The most pertinent phase to all of us, I'm sure, is the safety factor. The high rate of side effects is largely due to bleeding, expulsion, and pain, all of which are generally comparatively insignificant. The serious accidents (or their probabilities) are of greatest concern to us. In 6,000 cases only one bad experience with infection was reported in the Taiwan project, hysterectomy was required in this case. In another group six perforations occurred during 16,000 insertions, all at the time of insertion. In the same study there were 18 cases in which a portion of the device became imbedded within the wall of the cervix or the vagina during an episode of pelvic inflammatory disease. Difficult removal has been found to be even more rare.

INTRA-UTERINE DEVICES / Martin

The pregnancy rate is less with the loop than with the other types. In Puerto Rico, out of 15,000 cases there were four cases of accidental pregnancies with the large loop in situ. Two of these had early abortions; one delivered a viable, premature infant, and the fourth had an uneventful delivery. There is no evidence to implicate the devices in any way with endometrial or cervical cancer. In fact, studies now eliminate irritation as a cause of cancer of the body of the uterus.

There have been many ingenious experiments on a variety of animal types to shed some light on the mechanism of action of the IUD's. Perhaps the most attractive theory is upheld by studies on monkeys in whom pregnancy was prevented, apparently by a rapid peristaltic action of the tubes associated with discharge of the ova into the uterus

too rapidly for conception to occur. Certainly, this explanation also has definite theological factors in its favor.

In summary, our experience in Sunflower County leads us to believe that use of the IUD is an effective, safe, and efficient means of contraception. ★★★

University of Southern Mississippi (39401)

REFERENCES

1. Lippes, Jack: Contraception with Intra-uterine Plastic Loops, *Am. J. Obst. & Gynec.* 93:1024-1030 (Dec. 1) 1965.
2. Spencer, Steven M.: The Birth Control Revolution, *The Saturday Evening Post*, Jan. 15, 1966, pp. 21-25, 66-70.
3. Osborne, Frederick: This Crowded World, New York, Public Affairs Committee, 1960, pp. 3, 11.
4. Proceedings of the Second International Conference on Intra-Uterine Contraception, Oct. 2-3, 1964, New York City, p. 248.
5. Wolsterholme, Gordon: *Man and His Future*, Boston, Little, Brown and Co., 1963.

SUGAR BOWL

"What's the matter with Jones, the quarterback?" asked a football player of a teammate. "He looks unhappy."

"He is," was the reply. "His father is always writing him for money."

Hemolytic Disease Due To Anti-D Isoimmunizations In A First Born Infant

JOHN D. COFFEY, JR., M.D.

Natchez, Mississippi

HEMOLYTIC DISEASE of the newborn due to anti-Rh isoimmunization has been well documented and described in the literature and in standard textbooks.^{1, 2} The most frequently found Rh antigen responsible for Rh-positivity is the D factor.

The young Rh-negative woman who has never been pregnant nor had a transfusion of Rh-positive blood or an intramuscular injection of Rh-positive blood may be reassured with great confidence that her chances of becoming sensitized to the Rh factor are minimal, especially from the first pregnancy. However, the Rh-negative woman with an Rh-positive husband should be tested for Rh sensitization in each pregnancy. It is not safe to assume that antibodies will not develop in her first pregnancy or that she has not been sensitized by some unremembered injection of blood in the past.² The case presented below illustrates this point.

CASE REPORTS

M.I. was born on March 4, 1966, having an uncomplicated delivery. The mother had had no previous pregnancies and had no history of previous blood transfusion or intramuscular injections of blood. Her blood type was A Rh-negative, her husband's type O Rh-positive. The mother's VDRL was negative.

Her last menstrual period was May 25, 1965, expected date of confinement March 3, 1966. On August 2, 1965, an indirect Coombs' test was negative. Thirty-three days prior to delivery, she was hospitalized because of back pain and had a few uterine contractions; no bleeding was detected at that time. Aside from this, the pregnancy was uneventful.

A cord blood specimen was not obtained at that time of delivery. The infant's birth weight

was eight pounds, and when examined approximately one hour after delivery, it was noted to be slightly yellowish in appearance. When re-examined at age of 10 hours, the baby was obviously jaundiced. A blood specimen was obtained, this showing Hemoglobin 17.1 gm. per cent, total

It cannot be assumed that a first born infant of an Rh-negative mother and Rh-positive father will not have hemolytic disease of the newborn due to anti-Rh isoimmunization. To illustrate this principle, the author reports a case in which antibodies developed in a first pregnancy. He states that the Rh-negative woman with an Rh-positive husband should have an indirect Coombs' test late in pregnancy and that the cord blood should be examined by a direct Coombs' test on all such newborns, regardless of negative history of previous pregnancies or of transfusions and regardless of a negative indirect Coombs' test in early pregnancy.

bilirubin 13.8 mg. per cent with 2.2 mg. per cent direct reacting. A direct Coombs' test was positive; the baby's blood type was O Rh (D) positive.

She was given an injection of normal serum albumin 14 ccs. by way of the frontal scalp vein³ and two hours later an exchange transfusion was performed via the umbilical vein using heparinized type O Rh-negative blood, 500 ccs., matched and found compatible with the mother's blood.

At age 24 hours the total bilirubin was 10.9 mg. per cent with 2.2 mg. per cent direct reacting.

HEMOLYTIC DISEASE / Coffey

By age 56 hours the bilirubin had risen to a total of 20.4 mg. per cent with 3.21 mg. per cent direct.

Exchange transfusion was repeated again using type O Rh-negative heparinized blood. This time, the umbilical vein was entered aseptically by way of a skin incision at the base of the skin navel, dissecting out the umbilical vein and performing a venostomy for insertion of the vein catheter, according to the method described by Sanchez.⁴ On the following day, the jaundice had cleared considerably clinically and the total bilirubin had dropped to 10.9 mg. per cent. The infant was discharged on the fourth day of life with hemoglobin 17.8 gm. per cent.

An indirect Coombs' test was obtained on the mother on her third post-partal day and was positive, showing an anti-D titer in albumin of 1 to 128.

DISCUSSION

It seems possible that this mother may have become sensitized from fetal red cells entering her circulation at the time she had premature uterine

contractions and back pain 33 days before delivery.

This case is reported to emphasize the fact that one cannot assume that a first born infant of an Rh-negative mother and Rh-positive father will not have hemolytic disease of the newborn due to anti-Rh isoimmunization.² Indirect Coombs' test should be repeated late in pregnancy and cord blood examined by direct Coombs' test on all such newborns, regardless of negative history of previous pregnancies or of transfusions and regardless of negative indirect Coombs' test in early pregnancy. ★★★

49 Sergeant S. Prentiss Dr. (39120)

REFERENCES

1. Schaffer, A. J.: *Diseases of the Newborn*, ed. 2, Philadelphia, W. B. Saunders Company, 1966, pp. 617-628.
2. Allen, F. A., and Diamond, L. K.: Erythroblastosis Fetalis, *New England J. Med.* 257:659-668, 705-712, 761-772, 1957.
3. Odell, G. B.; Cohen, S. N., and Gordes, E. H.: Administration of Albumin in the Management of Hyperbilirubinemia by Exchange Transfusions, *Pediatrics* 30:613-621, 1962.
4. Sanchez, F. R.: A New Approach to Catheterization of the Umbilical Vein for Exchange Transfusion, *Pediatrics* 25:485-489, 1960.

IS PARIS BURNING?

The frantic woman rushed into the psychiatrist's office. "Doctor," she exclaimed, "you must help me. My husband smokes in bed."

"That's not unusual, Mrs. Jones," replied the psychiatrist. "Many people smoke in bed."

"Face down?" she asked.

Radiologic Seminar LVII: Blow-out Fractures of the Orbit

TOM B. DOMINICK, M.D.

Vicksburg, Mississippi

THIS IS A RELATIVELY uncommon fracture but one that should be considered in all injuries about the eye. The fracture is most often due to a blunt object striking the eye from the front. The thinner portions of the orbital wall, rather than the dense outer rim, are most often involved. Thus the external appearance of the eye may be misleading.

Any patient with post-traumatic diplopia or displacement of the eyeball should have a thorough x-ray examination. This is also true for those with a known history of direct force to the eye. Treatment of these fractures should be left to the specially trained.

The Water's projection is usually the best single x-ray study for demonstrating these fractures, but it may be necessary to take multiple views at different angles. Laminagraphy may be very helpful when standard views are negative.

The thin medial and inferior walls of the orbit are most often fractured by the direct force of the blow, but there may be associated fractures in the dense outer wall (Figure 1). Small spicules of bone displaced downward or medially may be the only positive x-ray finding.

The "polyp sign" (Figure 2) is very helpful in making a diagnosis of orbital fracture. The soft tissues are allowed to shift downward into the upper part of the maxillary sinus as the floor of the orbit is fractured and depressed thus producing a soft tissue mass. Hemorrhage into the sinus may cause opacification which makes the "polyp sign" difficult to outline. The clouding of the sinus following trauma to the eye should alert the observer to look for other signs of fracture such as changes in the shape and position of the infraorbital foramen. ★★★

REFERENCES

1. Freimanis, Atis K.: Fractures of the Facial Bones, *Radiol. Clin. N. Amer.* 4:356-357 (Aug.) 1966.
2. Zizmor, Judah *et al.*: Roentgen Diagnosis of Blow-out Fractures of the Orbit, *Am. J. Roentgenol.* 87:1009-1018 (June) 1962.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Mercy Hospital-Street Clinic.

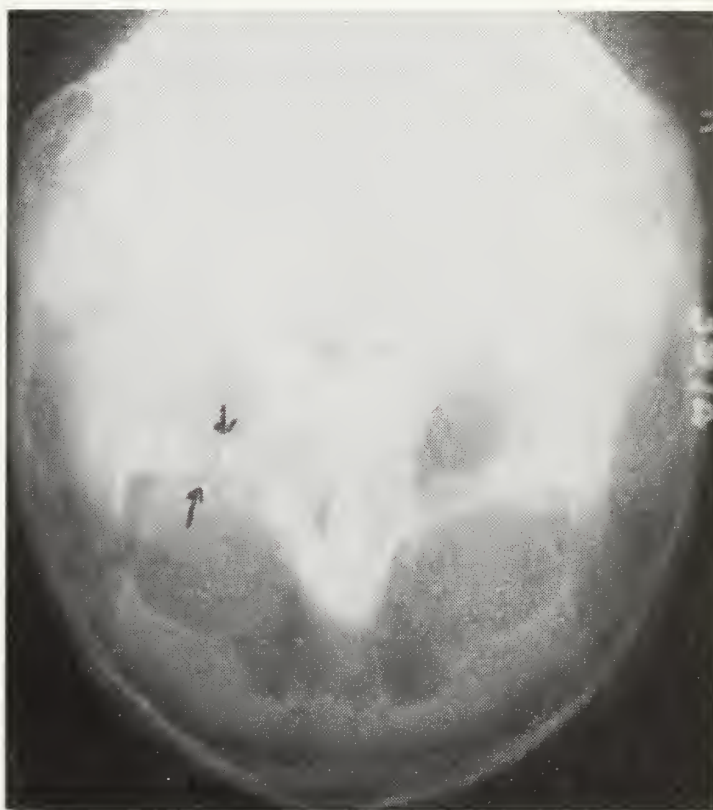


Figure 1. Fracture of the dense infraorbital rim. (Illustration retouched for purposes of clarity.)

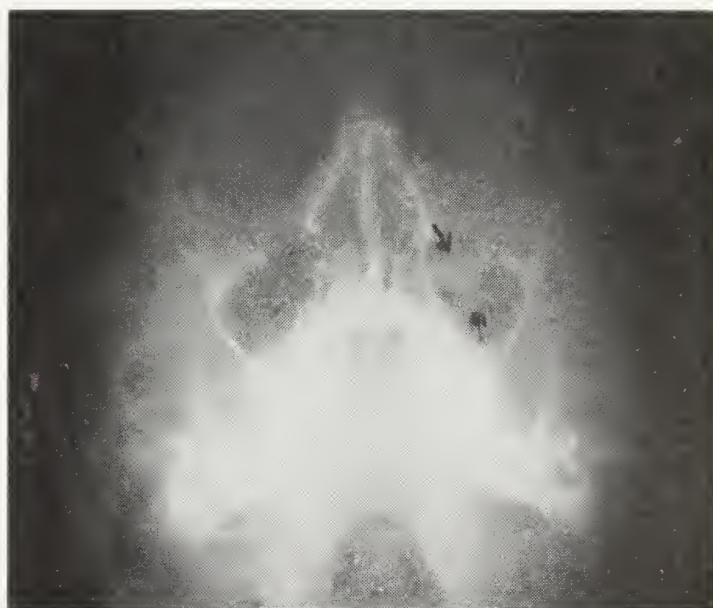


Figure 2. The "polyp sign" is seen in the upper portion of the maxillary sinus. (Illustrations retouched for purposes of clarity.)

Clinicopathological Conference LXXXIV

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

THIS 75-YEAR-OLD, colored female was admitted to the Mississippi Baptist Hospital for the first time Jan. 14, 1966, with a chief complaint of weakness and painful abdomen. She was said to have first become ill about a month before with fever and cough and was treated for bronchitis. Apparently, her fever subsided, but the cough kept hanging on while her children treated her with home remedies. Suddenly, on the day before admission, her abdomen became painful, and in the evening the patient became quite restless. She had an old ventral hernia, and it became larger and more tender. The patient stopped eating and a questionable history of constipation, possibly with some vomiting, was obtained. She was admitted to the hospital for further studies.

In her past history she reported the usual childhood diseases. She was said to have had repeated upper respiratory infections and a chronic cough, but this was thought to be a "cigarette cough" since the patient was a heavy smoker. She was said to have had pneumonia or pleurisy as a child. She had had no previous hospitalizations and no serious illnesses or accidents. Her mother died with cancer of the "womb." The cause of her father's death was not known. She had three children living and well.

On physical examination her blood pressure was 160/110 with a pulse of 90 and respirations of 24. Her pupils were equal and reacted to light and accommodation. Ear, nose, and throat examination were essentially normal. The neck showed no lesions. A slight tachycardia was noted on chest examination with a grade I precordial murmur. Some rales were noted at the right lung base, and breath sounds were described as harsh throughout the chest. The abdomen was soft and non-tender except in the epigastric area. In the mid-line above the umbilicus a small hernia was described as

smaller and less tender than it had been before hospital admission. The liver, spleen, and kidneys were not palpable. The genitalia and extremities were described as essentially normal. The patient was described as not cooperative, and she became somewhat speechless, although this was not thought to be paralysis.

In CPC LXXXIV, Dr. Robert E. Tyson discusses the case of a 75-year-old Negro female admitted with a complaint of stomach ache and weakness. Other discussers are Drs. William V. Hare, James P. Spell, J. Manning Hudson, and James M. Packer.

A surgical consultation was obtained, and the surgeon described abdominal distress associated with a mid-line ventral hernia above the umbilicus. He noted that while this area had been firm and tender earlier, on this examination it was soft. Peristalsis was described as normal. Flat and erect films of the abdomen did not suggest obstruction. A chest x-ray showed some pulmonary infiltration on the right. He did not believe that the patient was a surgical problem at the moment and suggested further observation.

An internal medicine consultation was obtained and the internist noted that the epigastric mass had been present for some time according to the daughter. He noted that the change in mental status was rather sudden and that subsequently she had become semicomatose. Blood pressure at this time (Jan. 15, 1966) was 180/120. The neck veins were noted to be dilated. No papilledema was present but the arterioles were noted to be of decreased size with spasm. Bilateral chest

rales were noted in the lung bases and he described the PMI as "heaving." The liver was described as 8 cm. below the right costal margin with a rounded edge. Upper level dullness was noted to the sixth or seventh intercostal space. No edema was noted in the extremities and pulses were present in them. No pathologic reflexia were noted. An electrocardiogram showed nonspecific ST-wave changes. The BUN at this time was recorded as 155 mg. per cent (one day after admission). It was the impression of the internist that the altered sensorium and nausea were probably due to uremia and that the lung changes could be either pneumonia or uremic pneumonitis. The large liver and tachycardia with dilated neck veins implied that heart failure was present. He thought that the hypertension was progressive because of the arteriolar spasm in the fundi. She was therefore digitalized and treated for heart failure, with no acute hypertensive treatment.

LABORATORY FINDINGS

The patient was noted to have a poor urinary output, and intravenous fluids were given to increase output. Her BUN on the day after admission (Jan. 15) was 155 mg. per cent. By Jan. 16 it was 195 mg. per cent. On Jan. 17 it was 190 mg. per cent. On Jan. 19 it was 230 mg. per cent. On Jan. 22 it was 242.5 mg. per cent. On Jan. 25 it had dropped to 215 mg. per cent which was the final laboratory recording. On Jan. 17 her blood pressure was up to 200/120, and her urinary output was recorded as 1500 cc. in the previous 24 hours. On Jan. 18 she was noted to have a strong pulse with a heart rate of 80 and a blood pressure of 200/120. On Jan. 20 she was noted to be definitely weaker and clinically worse. Her blood pressure was recorded that day as 160/110. Because of her rising BUN, fluids were increased. Her urinary output then decreased, and she sank into a deeper coma. Terminally, she had some convulsions shortly before death on her 14th hospital day (Jan. 27). Her temperature during her hospital stay was mostly in the range of 97-98° but terminally it rose to 102°.

Laboratory studies on Jan. 14, 1966 showed hemoglobin 11.4 gm., hematocrit 35 vol. per cent, sedimentation rate 13 mm. per hour, and white count 8,750, with 85 segs, 2 bands, 12 lymphocytes, and 1 monocyte.

On Jan. 15, 1966 calcium was 10.8 mg., chlorides 600 mg. per cent, cholesterol 237, alkaline phosphatase 1.0 Bodansky units, phosphorus 11.4 mg. per cent, protein 3.96 gm. of albumin

with 3.19 gm. of globulin for a total protein of 7.15 gm. per cent, SGOT 344 units. Urinalysis revealed 3+ albumin, negative sugar, 6-8 white cells and 4-6 red cells. Specific gravity was 1.035.

SUBSEQUENT STUDIES

Laboratory studies on Jan. 16, 1966 showed CO₂ combined power 29.6 vol. per cent, chlorides 650 mg. per cent, potassium 5.5 mEq./l., sodium 140 mEq./l., and SGOT 294 units.

On Jan. 17, 1966 the CO₂ combining power was 31.5 vol. per cent, and the serology was non-reactive. On Jan. 19, 1966 the CO₂ combining power was 29.6 vol. per cent, and SGOT 260 units. On Jan. 22, 1966 the CO₂ combining power was 21.1 vol. per cent, with chlorides 640 mg. per cent, potassium 5.6 mEq./l., and sodium 136 mEq./l.

Dr. Robert E. Tyson: "This is the story of a 75-year-old Negro female who came to the hospital complaining of stomach ache and weakness. A surgical abdomen was suspected, but she never developed symptoms or signs severe enough to warrant operation. Congestive heart failure was noted to be present with neck vein distention, tachycardia, moist basilar rales, and hepatomegaly. She gave a long history of hypertension, and the blood pressure was found to be elevated during this admission. Following admission to the hospital, she developed a rapidly progressive azotemia with blood urea nitrogen of 155 the day after admission, and a blood urea nitrogen of 240 by the time of her death some two weeks later.

REVIEW AND EVALUATION

"A review of the laboratory findings shows a modest elevation of the SGOT, which would not be unremarkable for the amount of congestive heart failure that she had. As her uremia worsened, she developed hyperkalemia, as one might anticipate. Phosphorus was elevated, also as one might expect in a patient with renal failure, such as she obviously had. Her urinalysis showed a marked proteinuria and 6-8 white cells with 4-6 red cells. All of these findings would be quite compatible with hypertensive cardiovascular disease, congestive heart failure, and arteriolar nephrosclerosis with developing terminal renal failure. Apparently some intra-abdominal disease process occurred acutely and precipitated this rapid downhill course.

I would like to ask a few questions if I could,

Dr. Hare. Was the patient jaundiced? No mention is made."

Dr. William V. Hare: "She was not jaundiced."

Dr. Tyson: "Then we need not concern ourselves with the hepatorenal syndrome. Was a creatinine done on this patient? One was not listed in that long list of studies."

Dr. Hare: "No creatinine determination was obtained."

Dr. Tyson: "Do you know if the patient's output was measured or if the patient was weighed during her stay in the hospital?"

Dr. Hare: "She was not weighed. The output was measured throughout most of her hospital stay and described as decreasing generally, although it fluctuated somewhat."

FLUID OUTPUT

Dr. Tyson: "On one day she had 1500 cc. No other measurements were given. Now, 1500 cc. is not oliguria. One would be remiss in discussing this CPC if he failed to mention that it is not good practice to give fluids to increase output as if pouring water into the veins would cause non-functioning nephrons to work again. This is very dangerous and can only result in drowning the patient. Daily weights are helpful in assessing the state of hydration."

Dr. Hare: "Here is an output record."

Dr. Tyson: "As best I can interpret this, she did indeed have a diminishing output of urine with recordings of 300 cc., 1000 cc., 250 cc., and



Figure 1. Gross appearance of kidneys. Note scarring and more severe shrinking on right side.

490 cc. In the face of such small outputs it would be best to limit fluids to around 400 cc. plus the amount that she was putting out. So, one would wonder if this convulsive episode shortly before she died was related to water intoxication.

"At a CPC it is usually best to think of some unusual condition. However, I will think of this as I would in the clinical situation in saying that with a 75-year-old, colored woman with high



Figure 2. Arrow indicates thrombus in aorta occluding ostium of left renal artery.

blood pressure and signs of having had high blood pressure for many years, the only diagnosis that one could reasonably arrive at would be hypertensive cardiovascular disease with arteriolar nephrosclerosis. One would then postulate she had renal failure and uremia. At time of autopsy one would expect to see some changes of pyelonephritis in the kidney since these are so commonly associated with the small contracted kidneys of hypertensive cardiovascular disease.

STRANGULATED HERNIA?

"People in this age group are well known to have volvulus, mesenteric thrombosis, and other vascular catastrophes as causes of symptoms. The obvious possibility of a strangulated hernia exists. Apparently the surgeon who was seeing her at the time did not feel these were present. Inasmuch as surgery was not done on this patient, all of them are certainly possibilities, but I would think she was simply an elderly female patient who died of renal failure associated with a vascular disease. Certainly the abdominal catastrophe which is not adequately diagnosed played a part in it. Perhaps the surgical consultant can help us in that regard."

Dr. James P. Spell: "I do not believe the patient had a surgical abdomen due to the incarcerated hernia. The mass is described as being smaller than it was previously. Also, I think appropriate x-rays would have readily pinpointed the possibility of intestinal obstruction due to a hernia, and we see no mention of such x-rays having been made in the protocol. In general, I would suspect this patient to have some type of vascular catastrophe of the abdomen. Since there is no history of concomitant emboli to other areas, I would most strongly suspect venous thrombosis involving some portion of the gastrointestinal tract. Considering the patient's extremely poor condition, I would have agreed with the surgical consultant, and I would have recommended further observation and evaluation before abdominal exploration. The sudden onset of her symptoms, however, would make me very suspicious of vascular phenomena."

Dr. J. Manning Hudson: "Dr. Hare will present the autopsy report."

AUTOPSY REPORT

Dr. Hare: "First, there was some pancreatitis. There were some specks all through the pancreas which grossly appeared to represent saponification and this was confirmed histologically, but it turns



Figure 3. Back view of aorta and renal artery showing complete recent occlusion of left renal artery.

out this is agonal pancreatitis. I mention it primarily because I was impressed at the gross autopsy and worried about it since pancreatitis had been considered. There certainly was an inflammatory reaction, so this is not a post-mortem phenomenon. These lesions occur in patients who die slowly, and particularly with uremia. Strangely

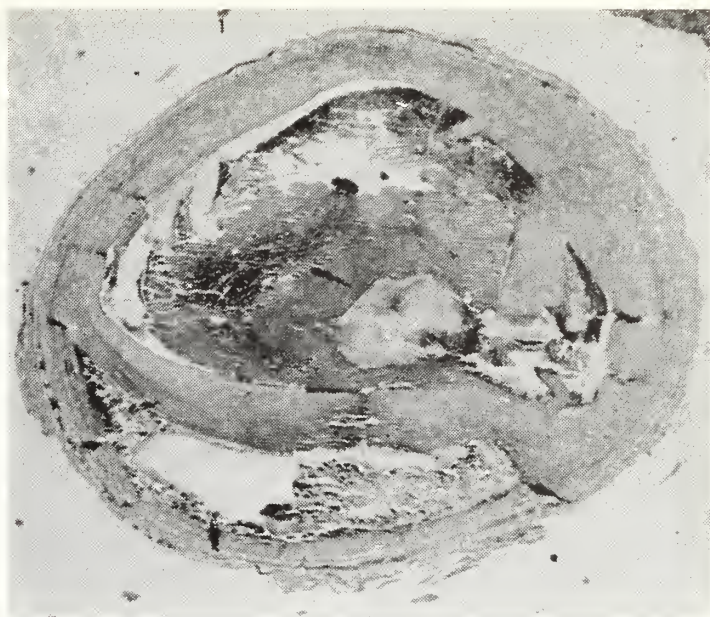


Figure 4. Cross-section of left renal artery showing thrombus mixed with atheroma.

enough, this form of pancreatitis doesn't seem to be clinical in the sense of symptoms, as they are dying and apparently the patients are too far gone to complain of pain. In looking back at the nurses' notes I couldn't find any complaints on this patient, so this is an incidental thing and I think we can pass over it.

"Now, note the kidneys (Figure 1). The kidneys were unusual in that they were quite small. You can see by the ruler they were about 8 cm. and about 6 cm. in length. The smaller one was on the right side. It weighed about 40 gm. against an expected weight of say 150 to 200 gm. The left one weighed about 80-100 gm. Now, there was diffuse scarring of both of these kidneys, but you notice it is not the usual fine scarring of nephrosclerosis. There is some granularity here which is arteriolar nephrosclerosis, but most of the change is in the form of big, coarse scars. The heart weighed 500 gm. and showed marked left ventricular hypertrophy, presumably due to hypertension in association with old scarring of the kidneys.

THROMBUS IN AORTA

"Here (Figure 2) is the segment of the aorta that includes the origins of the renal arteries. Note the ostium of the left renal artery at the bottom of the picture marked by the arrow. This is complete occlusion. It has started as an atheromatous plaque which calcified and perhaps you can see the plates of calcium. The ostium of the right renal artery is buried in the mass on the opposite side of the aorta. You cannot see it in the aorta at all and

only by cutting through the region of the renal artery outside of the aorta could we find it, and see that it was completely occluded. So, the right side has old complete occlusion and the left side has fresh complete occlusion. Essentially, the occlusion is an atheroma which has loosened and become stuffed in the renal artery. There is a superimposed thrombus but basically the lesion is an embolic atheroma from an aortic ulcer. In Figure 3 we see the aorta turned over on its back. Note that the left renal artery is completely thrombosed. There is a piece of atheroma out in the thrombus. Note that the wall of the renal artery is not materially thickened. In other words, this is not atherosclerosis of the renal artery itself. It had a good lumen and size but when the atheroma dumped in from the aorta, it precipitated the formation of a thrombus and this extended practically all the length of the renal artery.

MICROSCOPIC FINDINGS

"Now we will proceed to the microscopic findings. Basically what we see is that the right renal artery was occluded a long time ago by an atheromatous embolization from the aorta. The clefts in the clot were cholesterol clefts from the atheroma that embolized. So this was the old completely occlusive lesion. There was diffuse hyalinization in the right kidney of tubules, blood vessels, and glomeruli. Other samples from the right kidney looked just like this, so apparently this was a non-functioning kidney. A lot of calcification was noted suggesting many years' duration. There is nothing in the history to indicate exactly when infarction occurred on the right side. At that time of course, she had a spare kidney.

"In Figure 4 we see the left renal artery and a fresh clot or thrombus may be seen in it. This is the one we previously saw in the gross, and we can see that the complete vessel, allowing for a little artifactual dropping out of clot, is occluded by a thrombus. Other sections through it were taken at various levels and they were quite consistent with the clinical history of 14 days' duration. Therefore, this is probably the cause of her initial abdominal pain and the beginning of the rapid rise of the BUN, and so on.

"The patient did have at least terminal cardiac failure. In the liver the central vein area showed congestion with red cells, pigment, and actually a

little necrosis. This commonly causes mild jaundice but we didn't see any at autopsy. In the pancreas there was fat saponification. There was little reaction around it so it was quite fresh. In the pancreas proper there was "pseudoduct" formation from dilated acini. This pseudoduct formation is almost specific for uremia. It occurs in amino-acid deficiency (methionine) which we don't ordinarily see in humans. The present change is a severe one, going along with her severe uremia.

UREMIC PNEUMONIA

"In the lung there were classical changes of uremic pneumonia; many red cells in the alveoli, pink protein, and some fibrin.

"Basically, then, we have a case which is worrisome in terms of diagnosis and therapy in that a woman comes in with abdominal pain with rising BUN and oliguria. Even in retrospect, there seems to be nothing else on the chart to point to the real lesion in this case. I would like to raise two questions for Drs. Tyson and Spell. Namely, what more could have been done to establish the diagnosis, and secondly, if the diagnosis had been made, should she have had surgery?"

Physician: "Did they do an IVP?"

Dr. Hare: "They did not do an IVP."

Dr. Tyson: "Would the radiologist want to do an IVP on a patient with a BUN of 160? Generally non-visualization occurs if the BUN is above 50 in my experience."

Dr. James M. Packer: "We do them on much higher BUN levels than we formerly did, some being on levels above 100."

OTHER POSSIBILITIES

Dr. Tyson: "A creatinine would have been helpful in this patient on the day of admission or the day after, because it is unlikely that this patient's BUN went from 20, as you would expect a 75-year-old person's to be, to 155 in a matter of one day or two days. And if her creatinine had been low and the BUN had been high, then we would have thought this was acute renal failure; whereas if a creatinine had been done and found to be 10 or 15 then one would postulate that this was all chronic renal disease and just have used supportive measures for terminal renal failure. If it could have been shown that this was acute disease, then one would have looked for causes of acute renal failure such as renal artery disease.

Then the next logical step would have been probably retrograde pyelograms. I would like to hear a surgeon's comment on this.

"Given a patient with that much uremia, I don't believe there are many surgeons who would be interested in attacking her problem even if the nature of the lesion could be established."

Dr. Spell: "The acute onset of this patient's illness should have made me more suspicious of the disease which was found. I believe aortogram would have been the diagnostic test of most value rather than retrograde pyelograms. In this particular gravely ill patient, however, I am afraid I would have been quite reluctant to embark upon aortograms. Given a younger patient with the identical findings, however, I think we should be much more aggressive with regard to arteriography

in the diagnosis of unexplained abdominal catastrophies."

Physician: "If radioisotopes were available, would they be helpful in a case like this?"

Dr. Tyson: "Dr. Packer, can you answer that?"

Dr. Packer: "I think probably not."

Dr. Hare: "Let me be clear about one thing. While the right kidney was apparently completely non-functioning, the left kidney was also badly damaged by scarring. Because of the long duration of the destruction of the right kidney, we must assume that she was living on her left kidney, and as a corollary, it had reasonably good function until the present episode of thrombosis."

Dr. Hudson: "Thank you very much for a fine discussion." ★★★

1190 North State St. (39201)

MAYBE JOAN OF ARC

The clergyman was talking to the doctor and his wife just before christening their new baby.

"Think of the future this child may have. Who knows—you may be rearing a great church leader, a gallant general of the army, perhaps even a President of the United States. Now, what name did you say?"

Replied the parents: "Mary Ann."



The President Speaking

'Postgraduate Education'

JAMES T. THOMPSON, M.D.

Moss Point, Mississippi

MIGHT THE KNOWLEDGE EXPLOSION eventually overrun medicine's communications capacity and the ability of doctors to learn? Some say yes, but the forward strides in postgraduate medical education say no. And the odds are with the latter, because every level of medical organization and every source of medical education are bending themselves to the task of lifetime learning for physicians.

New and added emphasis to postgraduate education will be evident in the Millis Report which will soon be before the American Medical Association's House of Delegates. This is the citizens' commission established three years ago by AMA to examine the postgraduate dilemma, and many are encouraged by the preliminary proposals coming from this body. The American Academy of General Practice has already expressed its satisfaction with the direction of the study.

At the Las Vegas clinical convention, the AMA delegates approved the report of the *Ad Hoc* Committee on Education for Family Practice, a document largely concerned with curriculum revisions for training the family physician of the future. The delegates agreed with the committee and Council on Medical Education that the family physician should have access to a certifying board.

The medical schools are placing new emphasis on postgraduate work, and there is a move toward the orderly coordination of these programs with those of medical organization. With the support and understanding of American physicians, the pyramiding fund of knowledge will become the useful asset for which it was intended.

★★★



Doctor Draft: Medical Manpower Must Be Balanced

I

DOCTOR DRAFT is discriminatory, but it is also a necessity of national security. This was the thesis of a JOURNAL editorial more than a year ago when Public Law 81-779 of 1950 and its successor, Public Law 85-62, enacted in 1957, were analyzed in detail. Within American medicine, it is clear that few minds have changed on the necessity for quality medical care in the armed services as a vital aspect of national security. Quite a few minds, however, are having second thoughts about Doctor Draft discrimination and what can be done about it. Two hundred thirty-eight such minds in the AMA House of Delegates acted at the Las Vegas clinical convention, and their thoughts will be important as Doctor Draft comes up in the 90th Congress.

As the law now stands, physicians, dentists, and veterinarians who are otherwise liable for military service as regular registrants may be inducted at any time up to their 35th birthday. Additionally, the President of the United States has authority to call any medical, dental, or veterinary member of a reserve component to active duty for 24 months if he has not previously served at least one year and has not, at the time of his call, attained his 35th birthday.

Except for Berry Plan residents who are actually volunteer reservists in specialty training, the criteria for selection is all but wide open. Marriage

and fatherhood are not valid reasons for deferment unless hardship can be demonstrated. Physical fitness standards applied to physician-inductees are less stringent than those applied to other reserve officers. If a doctor of medicine can reasonably be expected to function effectively as a physician, he is acceptable. At the moment, under flexible and permissive authorities of the law, no physician under age 26 is liable for call.

II

As the current Doctor Draft law approaches its 17th year, the Congress must act to renew or revise it, or the law will expire. The present enactment went on the statute books at the time of the Korean War when, faced with an urgent and critical need for physicians, dentists, and veterinarians, the government had the choice of calling up reserve officers who had served in World War II or of enacting legislation providing for conscription of those who had been deferred during the war, who had received assistance under Navy V-12 or ASTP, or who had been graduated since 1946. The choice was obvious, and Doctor Draft became a reality again.

As the Viet Nam War has escalated, so has the need for medical officers. This has been vividly reflected in the draft calls, and the demands for 1966 exceed those of the two previous years. There is no easing of this demand in sight, and it must be anticipated that the Congress will act

EDITORIALS / Continued

promptly to renew the legislation and provide for continuation of the Doctor Draft.

What is of major concern to medicine, in the light of these hard facts, is coming to the Congress with useful, constructive suggestions to remove as many inequities as possible and to seek conservation of the nation's medical manpower.

The latter is of crucial importance, because there has been substantial inflation of medical need in the United States in the past two years. In addition to demands of the military, the Congress has enacted a multiplicity of government programs which, when implemented, will add to medical manpower demands. Among these are the Regional Medical Programs on Heart Disease, Cancer, and Stroke; the Mental Retardation program; the Community Mental Health program; and the various child care programs, to list a few.

III

The AMA House of Delegates found three basic flaws in Doctor Draft as it is presently constituted. First and most serious, there is no medical direction for the allocation of physicians among the armed services, other governmental agencies, and the general civilian population. Second and of almost equally critical importance, there is no medical direction over the priorities used by the Selective Service System for calling physicians to active duty. Third and finally, there is a need for a stronger medical voice within the Department of Defense at the highest level.

Allocation of physicians among the military, public agencies, and the general public is crucial to the health of all Americans. During World War II, the Procurement and Assignment Service, an agency directly under the President, sought to reconcile, in the best interests of the nation, the conflicting demands of the military and civilian health care needs. Because the effort was so massive and the commitment, so complete, this pioneering effort at physician rationing encountered little difficulty.

In the Korean War, the newly enacted Doctor Draft law was greatly assisted in that it was calling on an untapped pool of physicians and was guided by the Health Resources Advisory Committee. The system worked fairly well. But as the mid-50's rolled around and the demand from the military lessened substantially, HRAC became largely inactive.

The weak posture of HRAC was further undermined by the nature of part of its membership.

Representatives of the Department of Defense and the Department of Health, Education, and Welfare were among its voting members. It cannot be said that these representatives always voted against the interests of their respective departments when division of the medical manpower pool was at stake.

Currently, no agency counsels as to the withdrawal of physicians from service to the civilian population. Contrary to the advisory systems employed during World War II and the Korean War, the number of physicians demanded by the Secretary of Defense from the Director of Selective Service goes unchallenged. This has the effect of creating a climate of unilateral decision based solely upon the needs of the armed services. Thus, without medical direction over allocations and priorities, there is a potential for chaos, especially with the outlook on Viet Nam indicating a further building up of manpower.

IV

Obviously, changes in the Doctor Draft law are needed. A National Commission on Health Resources and Medical Manpower must be created by the Congress to see that legitimate need of the military are met without disruption of civilian needs. The commission must have clear authorities, so that no single agency can exert irrevocable control over draft calls for physicians, dentists, and veterinarians.

Moreover, AMA advocates the drafting of eligible women physicians. They now constitute 7 per cent of all medical school graduates, an important



Copyright 1966, Mississippi State Medical Association

"Congratulations, Mr. Shungulley. The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION has just selected you as the subject of the February clinicopathological conference."

With Hygroton, you'll discover that you can almost always use fewer tablets than is possible with other diuretics.

You may be told that a new short-acting diuretic was found more effective than Hygroton in congestive heart failure—but this was when twice the manufacturer's maximum recommended dose was given.* At the maximum recommended dose for both diuretics, two tablets of Hygroton were far and away more effective than five tablets of the other diuretic in producing natruresis and weight loss. And at these dosages, Hygroton costs only 1/3 as much as the other diuretic.

Since the discovery of chlorothiazide, the trend has been away from short-acting, multiple-dose, high-cost diuretics. With Hygroton you can usually do the job with just one tablet a day, or every other day.

More than any of the newer diuretics, Hygroton brings dosage and cost of medication down to earth.

Hygroton[®]
chlorthalidone

*Brest, A. N., et al.:J. New Drugs 5:329, 1965.

Indications: Hypertension and many types of edema involving retention of salt and water. **Contraindications:** Hypersensitivity and most cases of severe renal or hepatic disease. **Warning:** With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind. **Precautions:** Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. **Side Effects:** Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration. **Average Dosage:** One tablet (100 mg.) with breakfast daily or every other day. **Availability:** Tablets of 100 mg. in bottles of 100 and 1000. For full details, see the complete prescribing information. 6524-V(B)

HY-4735

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, New York

Geigy

segment of the medical manpower pool. Women serve in nearly all noncombatant components, especially in the military medical establishment. In further broadening the base of the pool, AMA believes that foreign physicians under age 35 who are in the United States on a permanent visa ought also be subject to the Doctor Draft. And to these, the House of Delegates added osteopaths who practice with unrestricted licenses in more than 35 states.

Full consideration must concomitantly be given civilian medical needs, and a single medical manpower roster must be employed by the government. Any draft call would be taken from this updated roster with full consideration for civilian as well as military needs. Any inequities wrought through local draft board selection would be eliminated.

The 90th Congress must develop a full appreciation for these critical problems in medical manpower and act to correct them as concerns Doctor Draft. Short of all-out war for national survival with demands similar to World War II, an unlikely thing in this nuclear age, the one way drafting of physicians must become a two way street. To do less is to win on the battlefield and lose at home.—R.B.K.

The Pillmakers Are Watching You!

Almost nobody can say that his personal inclinations, needs, and habit patterns are privy unto himself nowadays, what with the age of data processing, massively detailed surveys, and computers. Comes now Clark-O'Neill, Inc., of Fairview, N. J., the world's largest medical mailing and marketing service with an unusual program for communicating information on drugs to physicians and dentists.

Using two RCA Spectra computers, Clark-O'Neill is in the process of cataloging professional profiles on 380,000 physicians and dentists as well as detailed data on every major medical facility in the United States. By microsecond electronic scanning, the computers will instantaneously prepare mailing lists for introductory literature and samples of new drugs to those most likely to have need for them in professional practice. Thus, physicians whose specialties or subspecialties are related to use of a given drug will be pinpointed for the mailing.

Despite the fact that a sneaky electronic eye

in New Jersey is watching a surgeon in California, there may be some benefit for all. Perhaps no longer will the gynecologist receive samples of ophthalmic ointments nor the orthopaedic surgeon, literature on pediatrics cough syrups. It's all very promising—almost as good as a full page ad in the JOURNAL.—R.B.K.

Quackery, Inc.

The quacks not only have their strong words against medicine but an organization to crank them out as well. The National Health Federation, respectable sounding as it may seem, is the nation's number one tub thumper for nostrums, quack cancer remedies, chiropractic, and all the assorted forms of cultism, food faddism, anti-immunization, and anti-science. Both the *modus operandi* and organization of NHF are interesting.

When the American Medical Association and the U. S. Food and Drug Administration co-sponsored the Second National Congress on Medical Quackery at Washington in 1963, the National Health Federation conducted a "competing" convention at the same time in a hotel across town. An identical pattern was followed at Chicago last October, and NHF pickets paraded around in front of the AMA headquarters hotel espousing the virtues of Krebiozen, the phony cancer cure. NHF once sponsored a letter-writing campaign asking that Dr. Andrew C. Ivy, the chief proponent of Krebiozen, be appointed surgeon general of the nation.

The *NHF Bulletin* crusades fearlessly against such evils as the Sabin poliomyelitis vaccine, "poisonous" fluorides in water, and just about all immunizing agents. It also extolls the value of such eccentric foods as "wheatgrass" and urges everybody to consult his chiropractor regularly.

The founder of the National Health Federation is one Fred J. Hart of Monrovia, Calif., where, incidentally and conveniently, NHF is headquartered. Hart has called himself president of the Electronic Medical Foundation which was previously known as the College of Electronic Medicine. Hart has been enjoined by a U. S. District Court from distributing 13 electrical devices which the Food and Drug Administration labeled as misbranded and promoting false claims. Later, Hart was prosecuted for violating the court order and fined by another federal court. Others who have been listed as NHF officers are:

—V. Earl Irons, who served a prison sentence for misbranding Vit-Ra-Tox, a so-called vitamin mixture peddled house-to-house.

—Royal Lee, a nonpracticing dentist, twice con-

Look how many ways

Thorazine®

brand of

chlorpromazine

can help

	Tranquillizer	Potentiator	Antiemetic
Agitation	●		
Alcoholism	●		●
Anxiety	●		
Cancer patients	●	●	●
Severe neurodermatitis	●		
Drug addiction withdrawal symptoms	●		●
Emotional disturbances (moderate to severe)	●		
Nausea & vomiting	●		●
Neurological disorders	●		
Obstetrics	●	●	●
Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
Surgery	●	●	●
Tetanus	●	●	

'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. **Contraindications:** Comatose states or the presence of large amounts of C.N.S. depressants. **Precautions:** Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. **Side Effects:** Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with

I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories 

victed of violations of FDA laws and the recipient of a prison sentence.

—Roy F. Paxton, promoter of "Millrue," a phony cancer cure, two convictions by federal court, sentenced to three years and fined \$2,500.

—Andrew G. Rosenberger, proprietor of a "nature" food store, fined \$5,000 for misbranding dietary food products, six months suspended sentence and two years probation by federal court.

This is the naked face of quackery, and nobody should forget that it supports chiropractic. Is this what we want legalized in Mississippi?—R.B.K.

They Think Doctors Are Tops!

Public opinion polling has become so scientific that the outcome of an election can be foretold with only a small percentage of the votes in and counted. The pollsters know how many new electric refrigerators will be purchased in San Francisco this year and how many vacationing Americans will visit Florida. The same folks who formerly scoffed at the pollsters are now looking for their predictions in every edition of the morning paper and in each issue of their favorite news magazines.

No doubt, physicians are pleased with the more recent findings of the opinion researchers, because the legislative reverses notwithstanding, the American physician and his medical organizations are rating higher and higher with the public. Consider, for example, a special poll conducted by Dr. George Gallup for the National Society of Professional Engineers. Each respondent was asked which profession he would recommend to a young person seeking vocational guidance. By two-to-one, medicine was first.

And even with the broadsides absorbed by the American Medical Association over the past few years, the Opinion Research Corporation of Princeton, N. J., found that AMA rated number one in a survey on which organization has done most to improve the health of the nation. The Blue plans came in second, drug manufacturers third, and the U. S. Government got only 9 per cent of the first place votes.

In the same ORC study, about 85 per cent of all Americans said that health information published by AMA is reliable with only 4 per cent saying it was not. The remainder had no opinion. As to the value of AMA's pronouncements on

health legislation, very much a subject for recent controversy, one out of four said the information was very reliable, and nearly half said it was fairly reliable.

Two separate polls conducted in 1966 put the American physician in the spot of being the most admired and respected of professional persons. This is in contrast to a similar poll in 1947 where justices of the U. S. Supreme Court rated first and physicians second. More recently, the justices weren't even mentioned.

Last September, the *National Publisher*, a journalism magazine, found physicians first in a respect-for-professions survey made among editors. Interestingly enough, they rated newspaper reporters last, probably occupational prejudice.

It all goes to prove that high professional attainment, personal and ethical goals, and viable scientific organization as relate to American physicians have earned the respect of the medical care-consuming public.—R.B.K.



PERSONALS

D. L. BOLTON of Picayune has been elected chief of staff at the Lucius Olen Crosby Memorial Hospital. Other officers of the staff are CHARLES A. HOLLINGSHEAD, vice chief, and JOSEPH C. GRIF-FING, secretary-treasurer, both also of Picayune.

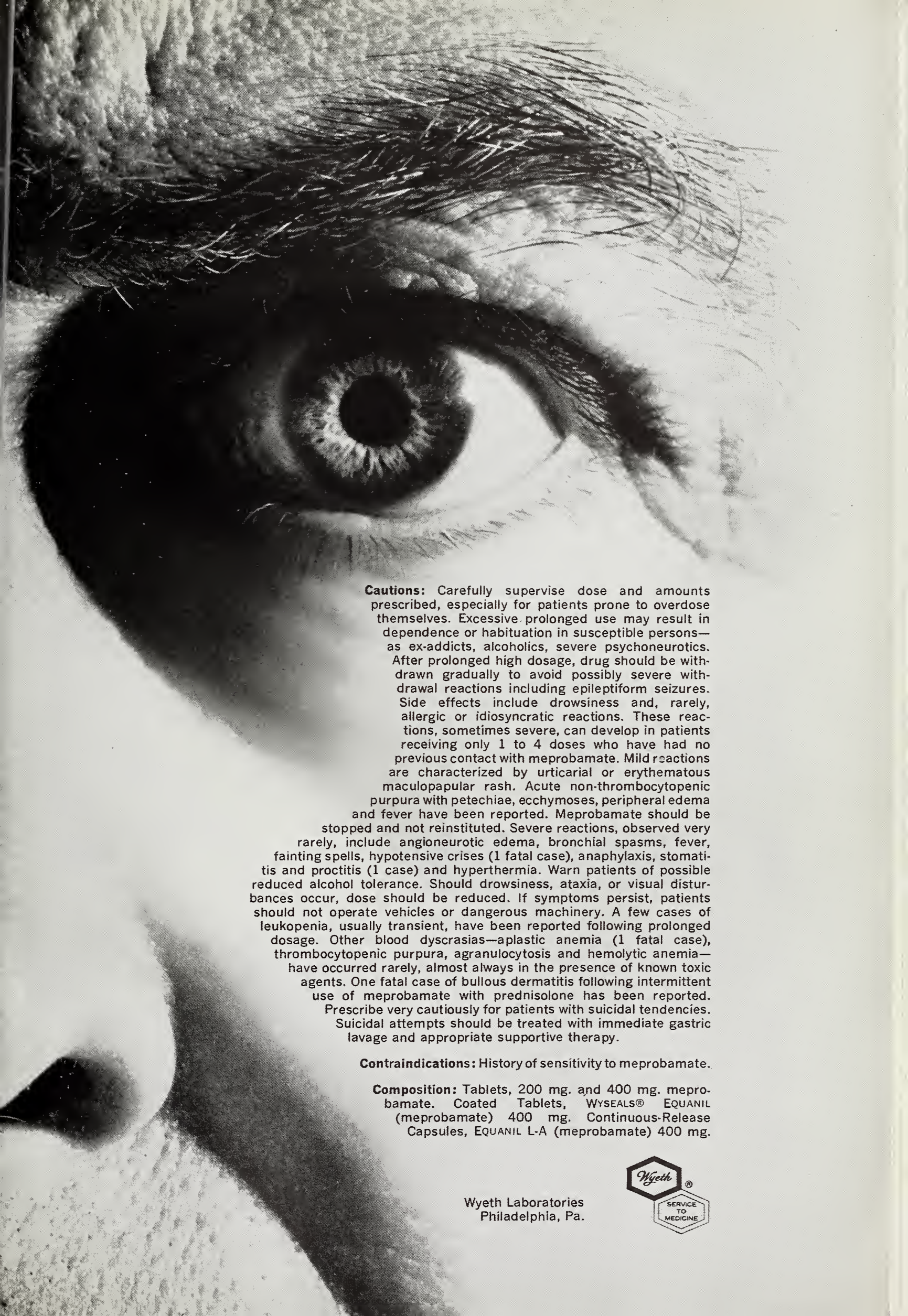
RICHARD G. BURMAN of Gulfport was elected chairman of the Gynecological Section of the Southern Medical Association during the group's recent 60th Annual Meeting at Washington. He is past president of the American Cancer Society, Mississippi Division, and past chief of staff at Memorial Hospital at Gulfport.

C. HAL CLEVELAND of Gulfport has been named president of the Coast Counties Medical Society. He succeeds EMILE M. BAUMHAUER, JR., of Pascagoula who served during the 1965-66 year.

FRANK B. HAYS has been elected a member of the board of directors of the Columbus Chamber of Commerce. His three year term begins Jan. 1.

JERALD S. HUGHES has been named president of the Bay Springs Country Club for 1967.

THEODORE T. LEWIS of Charleston has been elevated to chief of staff of the Tallahatchie General Hospital. Other officers of the medical staff are ALEXANDER W. HULETT, vice chief, and CHARLES



Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories
Philadelphia, Pa.



PERSONALS / Continued

W. TAINTOR, III, secretary, both also of Charleston.

ANDREW K. MARTINOLICH, JR., of Bay St. Louis has been installed as president of the Gulf Coast Chapter of St. Stanislaus Alumni Association.

ROBERT J. MOORHEAD of Yazoo City was presented with the Patriotic American Youth's patriotism award for 1966. Dr. Moorhead is a retired colonel and past president of the Central Medical Society and the Mississippi Chapter, American Academy of General Practice.

RAY H. STEWART of Mississippi City was named to the board of directors of the newly chartered Coast Better Business Bureau.

GERALD M. WALDEN has returned to private practice in Ripley where he is associated with RALPH D. FORD. Dr. Walden formerly practiced at Ripley but had been temporarily located at Hamilton, Ala.

W. BOYCE WHITE of Laurel has been elected president of the Jones County Medical Society, succeeding E. E. ELLIS. Other officers named for 1967 are C. D. BOUCHILLON, vice president; RAY F. MOTLEY, secretary; and WILLIAM E. WEEMS, treasurer.

THOMAS K. WILLIAMS, JR., of Jackson has been promoted to colonel in the Medical Corps of the National Guard. He is state surgeon of the Headquarters and Headquarters Detachment of the Mississippi Army National Guard and will assume command of the 213th Medical Battalion.

NAIL, HENRY RAY, Whitfield. Born Carroll County, Miss., June 21, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned Memorial Hospital of Chatham County, Savannah, Ga., one year; psychiatry residency, Mississippi State Hospital, Whitfield, one year; elected Nov. 1, 1966, by Central Medical Society.

TRIPLETT, RODNEY FASER, Jackson. Born Louisville, Miss., Jan. 25, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1959; interned Southern Pacific Memorial Hospital, San Francisco, Calif., one year; pediatric residency, University of Tennessee College of Medicine, Memphis, two years; pediatric allergy fellowship, University of Tennessee College of Medicine, Memphis, one year; pediatric allergy and immunology fellowship, University of Colorado Medical Center, Denver, one year; diplomate of the American Board of Pediatrics; elected Nov. 1, 1966, by Central Medical Society.

WEBB, HENRY HAROLD, Jackson. Born Gulfport, Miss., April 8, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned University of Mississippi School of Medicine, Jackson, one year; ob-gyn residency, University of Mississippi School of Medicine, Jackson, three years; member, Mississippi Ob-Gyn Society; elected Nov. 1, 1966, by Central Medical Society.



The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

MERRELL, WAFFORD HUMPHRIES, JR., Jackson. Born Bay Springs, Miss., July 30, 1935; M.D., Tulane University School of Medicine, New Orleans, La., 1960; interned Charity Hospital, New Orleans, La., one year; general surgery residency and urology residency, University Medical Center, Jackson; elected Nov. 1, 1966, by Central Medical Society.



Copyright 1966, Mississippi State Medical Association



POSTGRADUATE CALENDAR

SEMINAR IN GASTROINTESTINAL DISEASES

University Medical Center, Jackson
January 25, 1967, beginning at 8:55 a.m.

RADIOLOGIC ACCURACY IN THE EVALUATION OF GASTROINTESTINAL DISEASE

Robert D. Sloan, M.D.

NEWER METHODS OF DIAGNOSIS OF ABDOMINAL DISEASE

Lidio O. Mora, M.D.

GASTROINTESTINAL BLEEDING FROM LESS COM- MON CAUSES

William O. Barnett, M.D.

Recess for coffee

CURRENT PRACTICES IN DIAGNOSIS AND MANAGE- MENT OF ESOPHAGEAL HIATUS HERNIA

RADIOLOGIC ASPECTS

William M. Flowers, Jr., M.D.

MEDICAL ASPECTS

E. Leonard Posey, Jr., M.D.

SURGICAL ASPECTS

J. Harvey Johnston, Jr., M.D.

Discussion period

Recess for lunch

NEWER CONCEPTS IN PEPTIC ULCER DISEASE

RADIOLOGIC ASPECTS

James M. Packer, M.D.

MEDICAL ASPECTS

Lidio O. Mora, M.D.

SURGICAL ASPECTS

James D. Hardy, M.D.

Recess for coffee

DIAGNOSIS AND TREATMENT OF DIVERTICULITIS

MEDICAL ASPECTS

Samuel L. Stephenson, Jr., M.D.

RADIOLOGIC ASPECTS

Hugh C. McLeod, Jr., M.D.

SURGICAL ASPECTS

George E. Gillespie, M.D.

Discussion period

FIRST ANNUAL KIDNEY SYMPOSIUM

University Medical Center, Jackson
February 3, 1966, beginning at 8:30 a.m.
Sponsored by UMC and the Mississippi Kidney
Disease Foundation

Participants

John D. Bower, M.D., Instructor in Medicine and
Director of the Artificial Kidney Unit, UMC

Neal S. Bricker, M.D., Professor of Medicine and
Director of the Renal Division, Washington
University School of Medicine, St. Louis

William J. Flanigan, M.D., Department of Medi-
cine, University of Arkansas Medical Center,
Little Rock

Arthur C. Guyton, M.D., Professor and Chair-
man, Department of Physiology and Biophysics,
UMC

Ben B. Johnson, M.D., Associate Professor of
Medicine and Chief, Nephrology Division, UMC

J. M. Montalvo, M.D., Assistant Professor of
Pediatrics, UMC

Thomas A. Stamey, M.D., Professor of Surgery
and Chairman of the Division of Urology, Stan-
ford Medical Center, Palo Alto, Calif.

W. Lamar Weems, M.D., Assistant Professor of
Surgery (Urology), UMC

CHRONIC RENAL DISEASE: MEDICAL AND SUR- GICAL ASPECTS AND CHRONIC DIALYSIS

Morning Session, Herbert G. Langford, M.D.,
presiding

NEPHRON PHYSIOLOGY IN HEALTH AND DISEASE
Dr. Guyton

Discussion

Recess for coffee

NEPHRON ALTERATIONS IN RENAL DISEASE
Dr. Bricker

INFECTION IN CHRONIC RENAL DISEASE
Dr. Stamey

QUESTION AND ANSWER PANEL
Drs. Guyton, Bricker, and Stamey

REVERSIBLE FEATURES OF UREMIA
Dr. Flanigan

Recess for lunch

POSTGRADUATE / Continued

Afternoon Session, Temple Ainsworth, M.D.,
presiding

INFECTION IN CHRONIC RENAL DISEASE
Dr. Bricker

HYPERTENSION IN CHRONIC RENAL DISEASE
Dr. Stamey

GLOMERULONEPHRITIS AND NEPHROTIC
SYNDROME
Drs. Johnson and Montalvo

PERITONEAL DIALYSIS
Dr. Flanigan

HEMODIALYSIS
Dr. Bower

QUESTION AND ANSWER PANEL
Drs. Johnson, Bower, Flanigan, Montalvo,
Bricker, and Stamey

Artificial Kidney Unit Tour

CIRCUIT COURSES

COMBINATION CIRCUIT
Natchez: Feb. 21 and April 18
Columbus: Jan. 24, Feb. 28, and April 25

EAST CENTRAL CIRCUIT
Laurel: To be announced
Meridian: March 7, April 4, and May 9

SOUTHERN CIRCUIT
Biloxi: Jan. 4, 11, and 18
Hattiesburg: Jan. 5, 12, and 19

FUTURE CALENDAR

February 2

UMC DAY

February 23

CLINICAL NEUROLOGY II

March 9

ADVANCES IN PEDIATRICS

March 29-31

CARDIOVASCULAR SEMINAR

April 13

CONTROL OF DIABETES AND HYPERTENSION

State Morbidity Reported Through November 25

The Mississippi State Board of Health reports the following occurrence of morbidity for 1966 through the 47th week of the year, ending Nov. 25. Case totals are shown opposite the disease condition.

Tuberculosis, pul.	791
Tuberculosis, O.F.	50
Dysentery, bac.	82
Dysentery, amebic	6
Salmonella, inf.	44
Brucellosis	13
Diphtheria	7
Meningitis, men.	20
Meningitis, O.F.	88
Mononucleosis, inf.	28
Myelitis	6
Encephalitis, inf.	17
Tetanus	8
Hepatitis, inf.	291
Meningococcemia	4
Diarrhea of the newborn	4
Helminthic infections	
Hookworm	795
Ascariasis	398
Strongyloides	76
Taeniasis	19
Streptococcus infections	
Strep throat	3,140
Scarlet fever	48
Malaria, vivox	3
Mumps	314
Measles	1,081
Influenza	827
Chickenpox	241
Toxoplasmosis	2
Tularemia	4
Coccidiomycosis	1
Histoplasmosis	6
Polyneuritis	1
Rheumatic fever	4
Septicemia of the newborn	5
Syphilis	
Early	600
Late	127
Gonorrhea	4,338
Rabies in animals	
Bats	22



Book Reviews

Controversy in Internal Medicine. Edited by Franz J. Ingelfinger, M.D., Arnold S. Relman, M.D., and Maxwell Finland, M.D. 679 pages. Philadelphia: W. B. Saunders Company, 1966. \$14.50.

Doctors Ingelfinger, Relman, and Finland have edited an unusual and interesting collection of essays devoted to topics of timely importance for the general physician and surgeon. Unlike many medical texts prepared by panels of experts, this book succeeds admirably in presenting in considerable detail the pros and cons relating to pertinent medical problems in an informative way. Each chapter is devoted to one topic but contains several essays and in some instances it is difficult to be sure whether there is a real difference between the opinions expressed; whereas, in other instances, the position of the experts seems completely irreconcilable.

The controversial subject of certification by medical specialty boards, covered in the first chapter, has a special ring of appropriateness in view of the pressure today for superspecialization in the practice of medicine. As in each succeeding chapter, the conclusions expressed reflect the views of each essayist who was chosen not only for competence in the field but also for willingness to contribute to an open forum of this type.

One chapter deals with "Atherosclerosis and Diet" and here Stamler defends elegantly and in scholarly fashion the evidence believed to implicate metabolic factors, nutrition, and cholesterol in particular as etiologic facets in the genesis of atherosclerosis and coronary heart disease. A somewhat different opinion with reference to the importance of triglycerides as opposed to cholesterol in the development of atherosclerosis is expressed by Albrink in the second portion of the chapter. Altschule takes an altogether different and somewhat nihilistic stand with reference to the validity of the thesis that atherosclerosis results from a derangement of cholesterol metabolism. It is interesting to note, as summed up by Yerashalmy in a later and unrelated portion of the book,

how exceedingly difficult it is to obtain meaningful and reliable data from retrospective clinical studies used in the study of many diseases and particularly atherosclerosis. Because of this, it is suggested that statistics of assorted clinical information usually collected retrospectively is not only improper but unlikely to lead to reliable and useful conclusions.

The 21 additional chapters are handled in much the same way and deal with such subjects as the drug therapy of hypertension, use of anticoagulants and fibrinolytics, the treatment of duodenal and gastric ulcers, the control of obesity, the status of asymptomatic bacteriuria, the treatment of rheumatoid arthritis, as well as other equally relevant problems. Some chapters attract more attention than others, obviously a reflection of the interest of the reader, but all are well done and each is aptly commented upon by the editors.

This volume will have obvious appeal for medical students, house officers, and the seasoned practitioner in need of a source to sharpen the focus on common yet controversial medical subjects. Fortunately, most of the essays are followed by detailed bibliographies that provide a substantial backup of references for those who wish to read in depth in areas of particular interest. This book should be recommended reading for a wide range of individuals concerned with the care of patients.

FRED ALLISON, JR., M.D.

Cardiac Evaluation in Normal Infants. By Robert F. Ziegler, M.D., Physician-in-Charge, Division of Pediatric Cardiology, Henry Ford Hospital. 170 pages with illustrations. St. Louis: The C. V. Mosby Company, 1965. \$12.50.

It is clear that defining and evaluating normality and abnormality with reference to the infant cardiovascular system is difficult and controversial. The author discusses the changing physiology from fetus to infant, common findings possibly indicative of cardiovascular abnormality (e.g. cyanosis, murmurs), and important primary and secondary abnormal conditions affecting the infant's cardiovascular system. He clearly feels that electrocar-

LITERATURE / Continued

diography is more helpful to him than radiography as a clinical aid. The bibliography is extensive but there are few direct references to it and data regarding the author's personal experience is limited. Although many problems and possible pitfalls are discussed, this is not basically a practical guide to cardiac evaluation in infancy and will probably be of more interest to neonatal investigators than to practicing physicians.

DAVID G. WATSON, M.D.

Spontaneous Regression of Cancer. By Tilden C. Everson, M.D. and Warren H. Cole, M.D. 560 pages with illustrations. Philadelphia: W. B. Saunders Company, 1966. \$20.00.

The occasional unorthodox regressions and cure of untreated or incompletely treated cancer has intrigued the medical profession for years. Drs. Everson and Cole have now presented a well-documented discussion and case presentation of this phenomenon. Drs. Cole and Everson have long been interested in this subject in which a patient's bodily defensive forces may temporarily or permanently overcome the invading forces of cancer.

During the past decade, they have carefully collected a series of 176 cases of cancer which have shown either spontaneous regression or, apparently, a complete cure. In this series, spontaneous regression was noted most frequently in adenocarcinoma of the kidney, in which there were 31 cases, neuroblastoma—29 cases, malignant melanoma—19 cases, choriocarcinoma—19 cases, cancer of the bladder—13 cases, soft tissues sarcoma—11 cases, sarcoma of the bone—8 cases. Spontaneous regression of cancer was found less frequently in cancer of the colon and rectum—7 cases, cancer of the ovaries—7 cases, cancer of the testes—7 cases, cancer of the breast—6 cases, metastatic cancer with primary unknown—4 cases, cancer of the uterus—4 cases, cancer of the stomach—4 cases, cancer of the liver—2 cases, and one case each of cancer of the larynx, lung, pancreas, thyroid, and tongue. Thus, more than 50 per cent of the collected cases of spontaneous regression of cancer occurred in four types of cancer: adenocarcinoma of the kidney (hypernephroma), neuroblastoma, malignant melanoma, and choriocarcinoma.

After reviewing the protocol of all these 176 cases, the authors' opinion as to why it occurred was discussed. The most common belief was that hormone factors were responsible for spontaneous

regression followed by some type of immunological reaction, lack of blood supply, and metabolic changes.

RICHARD J. FIELD, JR., M.D.

Medicare Cuts Legal Red Tape

It is no longer necessary to appoint a legal representative to collect Medicare payments due a beneficiary's estate. This was the statement of Douglass M. Richard, regional representative of the Social Security Administration's Bureau of Health Insurance, in a special communication to the Mississippi State Medical Association.


"In some cases, the legal costs would be equal to or even exceed the amount of the reimbursement under Medicare," Richard said.


Where there is no legal representative of the beneficiary's estate or where none is expected to be appointed, Medicare will make payment to a surviving widow, widower, or other relatives, he added.

Where the bill has been paid, Richard said that the Title XVIII payment will be made to the individual who paid all or part of the bill as creditor of the estate if he agrees to distribute the proceeds among any others who paid part of the bill or who may be entitled to sums under state law. If the bill has not been paid, the fiscal intermediary of the hospital or carrier for the supplementary insurance will pay directly to the provider or physician if an assignment is taken.



DEATHS

 BASKERVILL, GEORGE, Greenwood. M.D., Tulane University School of Medicine, New Orleans, La., 1901; member Southern Medical Association and member of the MSMA Fifty Year Club; Emeritus member of MSMA; past president of the Delta Medical Society; died Nov. 1, 1966, aged 89.

 KEMP, EMMETT DEMPSEY, Magee. M.D., Memphis Hospital Medical College, Tenn., 1911; Emeritus member of MSMA and member of the MSMA Fifty Year Club; presented the "Golden T" certificate by the University of Tennessee College of Medicine, Memphis; died Nov. 17, 1966, aged 83.



Iowa Pediatrician Is Named New Dean of Ole Miss Medical School

Dr. Robert E. Carter will become the third dean of the four year University of Mississippi School of Medicine and director of the medical center on Feb. 1. He was appointed to the post by the Board of Trustees of Institutions of Higher Learning, according to Dr. J. D. Williams, chancellor of the university.

Dr. Carter, 43, is now associate dean of the University of Iowa College of Medicine in Iowa City where he is also a professor of pediatrics.



Dr. Robert E. Carter, right, becomes UMC dean on Feb. 1. With him are Dr. John A. Gronvall, newly named associate dean, left, and Ole Miss Chancellor J. D. Williams.

He succeeds Dr. Robert Q. Marston, former vice chancellor, who resigned last spring to head the new Regional Medical Programs of the National

Institutes of Health in Washington, D. C.

At Dr. Carter's request, Dr. John A. Gronvall will be appointed associate director and associate dean, also on Feb. 1. Formerly an assistant dean, Dr. Gronvall has served as acting director and acting dean at the Mississippi institution during recent months.

The new University Medical Center administrator is a native Minnesotan and has both his undergraduate and his M.D. degrees from the University of Minnesota. He interned at Cleveland (Ohio) City Hospital, and took his pediatric specialty training at the University of Chicago. He is a fellow of the American Academy of Pediatrics.

He is a member of Alpha Omega Alpha and Sigma Xi, honor societies, and in 1957 was named to a five-year Markle Scholarship in the Medical Sciences. Dr. Carter has taught at Minnesota and the University of Chicago, and joined the Iowa faculty in 1959. He is a Navy veteran, and has worked at the Los Alamos (New Mexico) Scientific Laboratory.

Among other honors is a recent recognition from the American Academy of General Practice which awarded Dr. Carter a certificate of meritorious service.

In announcing Dr. Carter's selection to head the 11-year-old medical center, Chancellor Williams pointed to the center's spiralling growth since it opened in 1955. He stressed the increase from 165 students in 1955 to 696 in 1966, the doubled size and value of the physical plant, and annual research support now topping \$3,500,000. The Chancellor praised Dr. Carter's breadth of background, administrative experience and scientific stature.



Now, now, Mrs. Forsythe, we've never lost a cold patient yet.

When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes distressed about her condition.

She will breathe easier when you prescribe Novahistine LP.

Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the morning and repeated in the evening will usually keep air passages clear for 24 hours.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution patients who operate machinery or motor vehicles as drowsiness may result.

Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

DOW PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis

NOVAHISTINE[®] LP

For relief of nasal congestion.

Saxon

Dr. Vise Is Installed as New SMA President

Dr. Guy T. Vise of Meridian was installed as president of the Southern Medical Association at the President's Night Annual Dinner Banquet during the 60th Annual Meeting of the Southern Medical Association in Washington, D. C. He is a graduate of the University of Tennessee College of Medicine and was born in Decaturville, Tennessee.

Dr. Oscar B. Hunter, Jr., of Washington, D. C. was named president-elect of the SMA. He is director, Department of Pathology, Doctors Hospital, and of the Oscar B. Hunter Memorial Laboratory in Washington.

Dr. Donald Marion of Miami Beach, Fla., was elected first vice president, and Dr. William P. Herbst, III, of Washington, D. C. was named second vice president. Dr. Marion is a graduate of Duke University and is editor of the Dade County (Fla.) Medical Bulletin and a member of the Dade County and Florida State Medical Societies.



Dr. Guy T. Vise, left, receives the gavel and congratulations as new SMA president from J. Garber Galbraith, outgoing president.

Dr. Albert C. Esposito of Huntington, W. Va. was elected chairman of the SMA Council. Dr. Esposito formerly served as vice chairman of the Council and chairman of the Committee on Medical Students.

The winner of the scientific exhibits at the meeting went to a combined presentation by the Howard University College of Medicine; Freedmen's

Hospital, and the D. C. General Hospital, all of Washington, D. C., for their exhibit on "Pediatric Dermatology Observations on Negro Infants and Children." The award was made by Robert F. Butts, executive director of the association.

At the annual President's Luncheon held during the four-day meeting, Dr. Milford O. Rouse of Dallas, president-elect of the American Medical Association and a former president of the SMA, was the guest speaker.

Medical student representatives from 33 medical schools also attended the meeting.

About 4,000 physicians from 16 southern states and the District of Columbia attended the sessions which covered 22 specialty sections and many general medical subjects. Two of the highlights of the meeting were the origination of seven closed circuit color television operations from Doctors Hospital beamed to a large 10-foot screen in the International Ballroom at the Washington Hilton Hotel and a closed circuit television series of programs on the SMA TV network reporting convention activities to the delegates who attended the meeting.

MHA Announces New Grant Program for '67

The Mississippi Heart Association has announced its 1967-68 grant program to assist scientific research and investigation, according to Lucile Little of Jackson, executive director of the statewide voluntary health organization. Applications for grants must be received by or before April 1, Miss Little said.

Heart association grants are made to nonprofit institutions in direct support of an investigator who has received his doctorate within the past year. The amount, except under unusual circumstances, will not exceed \$2,000, the announcement stressed.

In addition to individual grants, Miss Little said that the heart association will continue its yearly support of the chair of cardiovascular research at the University Medical Center with a gift of \$20,000. Present occupant of the chair is Dr. William D. Love of Jackson.

During the 1966-67 year, the association awarded \$45,500 in fellowship grants to seven departments at UMC and on the Oxford campus. Eight grants of \$2,000 each were made to designated investigators. The association is supported by voluntary gifts made annually during Heart Month.

Does he really care?
Is he alert, encouraged,
positive and optimistic
about getting out of bed
and back to work soon?
Or is he giving in to
the depressing impact
of confinement?
When functional fatigue
complicates convalescence,
Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that so often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic[®]

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Dr. John G. Archer Is 50 Year Honoree



Dr. John G. Archer of Greenville, former state medical association president and member of the Board of Trustees, receives his 50 Year Club pin and certificate from Dr. T. Scott McCay, president of the Delta Medical Society. Presentation ceremony was conducted during the recent Greenville meeting of the Delta group.

WU Surgeon Will Lecture at UMC

Dr. Henry N. Harkins, professor of surgery at the University of Washington School of Medicine, will lecture at the University of Mississippi School of Medicine, Jan. 15-18, as annual visiting professor of surgery.

Principal lectures will deal with a properitoneal operation for all groin hernias, physiologic principles of peptic ulcer surgery and surgical management of peptic ulceration.

Powerful Color TV Is Teaching Aid

The State University of New York's Upstate Medical Center at Syracuse has scored a medical teaching first with the installation of a special high resolution color television system. It is said to be one of two such systems in existence, the other being used by NASA to study the true color of rocket exhausts.

University spokesmen said that the new TV system is far superior to conventional color television which has approximately 200 lines of green and only 40 lines each of red and blue. Its limitations, therefore, include the inability to reproduce and transmit colors of small areas such as operative sites.

The new system has 300 lines of resolution in each color. In a recent demonstration before a regional meeting of the American College of Physicians, observers said that the TV image of open-chest demonstration of cardiac arrhythmias was as clear as if the viewer were at the operating table.

The high resolution system was developed in the bioelectronics laboratories of the university, spokesmen added. It has the capacity of projecting the color image on a 48 inch screen.

Coast Counties Society Honors Dr. Van Pelt



The coveted 50 Year Club pin goes on the lapel of Dr. James F. Van Pelt of Gulfport, second from left, as he is honored by the Coast Counties Medical Society. Officials of the society are, from the left, Drs. C. Hal Cleveland, Emile M. Baumhauer, Jr., and Wallace S. Sekul.

ACS Sets Combined Sectional Meeting

Physicians and graduate nurses are invited to the annual combined Sectional Meeting of the American College of Surgeons in New York, Feb. 27 through March 2. Headquarters hotel for doctors is the Americana, and for nurses, the Hilton. This is the College's only four-day meeting scheduled for 1967 and the only one with a program for nurses.

Scope of this meeting approaches that of the College's annual Clinical Congress. In addition to general surgery, there will be programs in the specialties of gynecology-obstetrics, neurosurgery, ophthalmology, orthopedics, plastic, proctology, thoracic, urology and a special full day devoted to trauma.

Recent medical films will be shown daily, and some 50 industrial exhibits on new products will be on display.

Nurses discussions will include internal cardiac pacemakers, trends in open-heart surgery, reconstructive surgery, surgical instruments, middle ear surgery, interdepartmental liaison, neurosurgical

teams, ophthalmological patients, and surgical technicians.

Dr. John L. Madden, New York, heads the committee of surgeons in charge of the doctors' sessions, and Miss Barbara Ann Volpe, R.N., the nurses' planning committee. Dr. Woodrow L. Pickhardt, Chicago, is in charge of all College Sectional Meetings.

Viet Nam Plague Is Travel Hazard

Travelers to Viet Nam are strongly advised to secure immunization against bubonic plague, according to Dr. Durward L. Blakey, director of the Division of Preventable Disease Control of the Mississippi State Board of Health.

In his weekly morbidity report, Dr. Blakey said that the U.S.P.H.S. Department of Foreign Quarantine reported more than 300 cases in the war-torn Asian nation last year. The standard course of vaccination is three injections. The first two are given 30 days apart and the third from four to 12 weeks following the second. In plague areas, a booster at three-month intervals is advised.

Announcing the Thirtieth Annual Meeting of THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

Conference Headquarters—Roosevelt Hotel, March 6, 7, 8, 9, 1967

GUEST SPEAKERS

John Steinhaus, M.D., Atlanta, Ga.
Anesthesiology

H. R. Reichman, M.D., Salt Lake City, Utah
Colon and Rectal Surgery

Rees B. Rees, M.D., San Francisco, Calif.
Dermatology

Jose M. de la Vega, M.D., Mexico, D. F.
Gastroenterology

Nicholas J. Pisacano, M.D., Lexington, Ky.
General Practice

Gordon W. Douglas, M.D., New York, N. Y.
Gynecology

Robert C. Hartmann, M.D., Nashville, Tenn.
Internal Medicine

C. Thorpe Ray, M.D., Columbia, Mo.
Internal Medicine

A. Earl Walker, M.D., Baltimore, Md.
Neurological Surgery

Humbert L. Riva, M.D., East Orange, N. J.
Obstetrics

Arthur H. Keeney, M.D., Philadelphia, Pa.
Ophthalmology

Robert W. Bailey, M.D., Ann Arbor, Mich.
Orthopedic Surgery

John J. Conley, M.D., New York, N. Y.
Otorhinolaryngology

F. William Sunderman, M.D., Philadelphia, Pa.
Pathology

Alexander J. Schaffer, M.D., Baltimore, Md.
Pediatrics

Henry J. Woloshin, M.D., Philadelphia, Pa.
Radiology

Curtis P. Artz, M.D., Charleston, S. C.
Surgery

Richard T. Shackelford, M.D., Baltimore, Md.
Surgery

John T. Grayhack, M.D., Chicago, Ill.
Urology

Lectures, symposia, clinicopathologic conferences, round-table luncheons, medical motion pictures, technical exhibits and entertainment for visiting wives. (All-inclusive registration fee—\$25.00.)

This program is acceptable for thirty and one-half (30½) accredited hours by the American Academy of General Practice.

For information concerning the Assembly meeting write Secretary
The New Orleans Graduate Medical Assembly, Room 1528
1430 Tulane Avenue, New Orleans, Louisiana 70112

MPAC

AMPAC

give you **IMPACT**, doctor!

But make it a mutual impact, doctor, because your PAC needs you and you need your PAC. Both AMPAC and each of the 50 state PAC's are voluntary, nonprofit, unincorporated, autonomous groups whose members are physicians, their wives, and others in allied professions. Every group is bipartisan, bound by no party label. The voting record, platform, and program of a candidate—not his party—is what the PAC considers.

The basic purpose is twofold: To educate in political affairs and to provide a means through which the physician-citizen can effectively make his voice heard in the political arena. MPAC is medically oriented and medically directed by a 10 member board consisting of nine physicians and a Woman's Auxiliary representative.

With the elections behind, MPAC is looking ahead to 1968 when there will be a job to do. Make your voice count by sending your dues today, \$10 for MPAC and \$10 for AMPAC. Better send dues for your wife, too.



MISSISSIPPI MEDICAL
POLITICAL ACTION
COMMITTEE

DIRECTORS: Howard A. Nelson, M.D., Greenwood, Chairman □ E. Leonard Posey, M.D., Jackson, Secretary-Treasurer □ Robert L. Holley, M.D., Oxford □ Frank M. Davis, M.D., Corinth □ Paul B. Brumby, M.D., Lexington □ E. E. Robinson, M.D., Meridian □ James C. Bass, Jr., M.D., Laurel □ G. Swink Hicks, M.D., Natchez □ Kendall D. Gregory, M.D., Gulfport □ Mrs. R. Mayo Flynt, Meridian, Woman's Auxiliary

PMA Answers FDA 'Shotgun' Charge

A spokesman for the prescription drug industry asked a group of advertising executives in Washington if it isn't time "to package our government in truth along with our corn flakes."

C. Joseph Stetler, president of the Pharmaceutical Manufacturers Association, cited a case in which the Food and Drug Administration last spring accused "one-third of the members of the PMA" with advertising violations. He said that after repeated and unsuccessful PMA efforts to obtain details from FDA, the association was handed from another source the agency's list which fell "considerably short" of one-third of the PMA membership.

Furthermore, Stetler declared, "the list we have indicates that ads involving fewer than five per cent" of the PMA membership were forwarded to FDA's legal department where formal allegations of violations must be made.

"Isn't it fair to require that an agency which demands the truth deliver the truth?" Stetler asked

the Washington Pharmaceutical Advertising Club.

Calling FDA a lifetime partner "and a welcome one" for the pharmaceutical industry, the PMA president observed that if the interest of the public is going to be served, "our relationship with the FDA must be one of honest respect for each other."

Stetler noted, however, that he is not sure but that the one thing the consumer truly needs "is something to protect him from his protectors."

"For myself," he said, "I am growing weary of that discordant chorus which claims that industry, all industry presumably, is engaged in a lasting campaign to bilk the purchasing public and that the government, and only the government, can protect consumers from these predators."

In a move aimed at greater self-regulation of the drug industry by its own members, Stetler announced the creation of a special committee of "experts in advertising, medicine, law, public relations, and management" headed by Dr. Austin Smith, former PMA president and now vice-chairman of the board of Parke, Davis and Company. He said that the committee has begun to "examine and hopefully improve the high standards of drug industry promotion."

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.

ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.

MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

Second Dentist Joins State Board of Health

Dr. James A. Crellin has been appointed dental health officer of the Mississippi State Board of Health and assistant to the director of the Division of Public Health Dentistry, according to an announcement by Dr. A. L. Gray, SBH executive officer. The appointment became effective with the elevation of the dental office to full division status.

In his new duties, Dr. Crellin will assist Dr. Aaron Trubman, the division director, in planning and evaluating community dental programs, in special education projects, and in providing special clinical service demonstrations.

Dr. Crellin, a native Nebraskan, was in private practice for 17 years before entering the University of North Carolina School of Public Health where he earned the master's degree. He received the A.B., B.S., and D.D.S. degrees at the University of Nebraska.

The division was formerly a unit under the SBH Division of Maternal and Child Care. Dr. Gray said that in the six years he has served as dental chief, Dr. Trubman has directed a broad program and has gained the understanding and support of the Mississippi Dental Association.

S.S. Hope Will Sail for Colombia

The *S.S. Hope* will undertake a 10-month mission to Colombia this year, according to an announcement by Dr. William B. Walsh of Washington, D. C., president and founder of Project Hope.

Dr. Walsh said the familiar white hospital ship will sail Feb. 7 for the port of Cartagena, on Colombia's Caribbean coast, arriving there Feb. 17. Hope's volunteer doctors and nurses will then begin an intensive medical teaching-treatment program which will continue through Dec. 15, 1967.



Dr. Crellin

Project Hope was invited to Colombia by the Colombia Medical School Association and the University of Cartagena School of Medicine in cooperation with the government of Colombia. While in Cartagena, the ship will conduct training programs with Colombian physicians, dentists, nurses, technicians and allied professional personnel. Classes and clinics will be held aboard the ship and in shore-based installations. Public health education programs will be conducted in personal hygiene, nutrition, sanitation, and family planning.

Colombia will be the seventh nation visited by the *S.S. Hope* since it first set sail in Sept. 1960. Previously the ship has conducted similar programs in Indonesia, South Viet-Nam, Peru, Ecuador, and Guinea. The ship is currently concluding a 10-month mission to Nicaragua and will return to New York for repair and resupply.

Project Hope is the principal activity of The People-to-People Health Foundation, Inc., an independent, non-profit corporation sponsored by the American people.

Pepper Joins Staff of Mental Commission

Dr. Dorothy N. Moore, program director of the Mississippi Interagency Commission on Mental Illness and Mental Retardation, announced today that T. C. Pepper, Jr. has joined the commission staff as its statewide program development specialist.

Pepper will assist citizens groups and municipal and county governments in drawing up guidelines for the establishment of regional treatment centers for the mentally ill and mentally retarded under new state laws creating the commission and its long-range program.

Pepper formerly was with the state's economic development agency, the Mississippi Agricultural and Industrial Board, as an industrial representative. Before that, he was assistant director of the Industrial Development Department of the Delta Council, serving the Delta counties in economic development.

"Mr. Pepper's work as an industrial development representative," Dr. Moore said today, "gives him the background and experience our program needs in formulating action programs calling for coordination at the state and local levels."

Pepper is a graduate of Mississippi State University, where he received a Bachelor of Science degree in business administration. He is a veteran of Army service with a Nike-Hercules missile unit.

Heart, Cancer, Stroke Grants Are Made

The four most recent grants for Regional Medical Programs awarded by the Public Health Service brought to 14 the total number of regions now planning programs to improve diagnosis and treatment of heart disease, cancer, stroke, and related diseases since the Amendment to the Public Health Service Act providing for these programs was signed into law a year ago.

The newest regions are represented by the states of Wisconsin and Oklahoma, a two-state area made up of Washington and Alaska, and the city of Rochester (New York) together with 11 of its surrounding counties.

The new planning areas, when added to the 10 regions previously established and announced, increased the geographical coverage of the Regional Programs to include some 43 million people, or 22 per cent of the country's total population. When an additional estimated 40 grant applications which are presently in various stages of preparation or are already in the review process are added, the total is increased to nearly 95 per cent of the country's population.

"These figures indicate that we are now well on our way toward one of the first goals of the legislation which established this program," said Dr. Robert Q. Marston, Associate Director of the National Institutes of Health and Chief of the Division of Regional Medical Programs. That goal is directed toward developing regional cooperative arrangements among the health resources of a region for the purpose of affording them the opportunity of making the latest scientific advances in diagnosis and treatment available for patients in these regions.

"What is particularly gratifying in looking back over the past year is that all of the approved, pending and other Regional Programs now in process of being prepared are, as specified by law, being developed under local initiative of the physicians and other health officials, together with civic leaders and others representing virtually all of the organizations and institutions involved in health care and education in their own regions. It is from this local initiative of each region defining its own needs and planning how to best meet those needs that applications for subsequent operational grants can be expected to be developed and received."

The law, actually Title IX of the Public Health Service Act, is based on certain recommendations

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 595-1151

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA



after surgery

B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.



Stresscaps[®]
Stress Formula Vitamins Lederle



Each capsule contains:
 Vitamin B₁ (Thiamine Mononitrate) 10 mg
 Vitamin B₂ (Riboflavin) 10 mg
 Vitamin B₆ (Pyridoxine HCl) 2 mg
 Vitamin B₁₂ Crystalline 4 mcgm
 Vitamin C (Ascorbic Acid) 300 mg
 Niacinamide 100 mg
 Calcium Pantothenate 20 mg
 Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

Lederle
627-6-31

of the President's Commission on Heart Disease, Cancer, and Stroke. Its initial purpose is to provide for support of planning activities for the development of Regional Medical Programs to plan and establish improvements in the diagnosis and treatment of those diseases. As indicated, the provisions of the law are intended to generate regional cooperative activity among all individuals, organizations and institutions involved in all aspects of health.

The law requires that a Regional Advisory Group be established which is broadly representative of all of these elements in a region which they themselves must define, and for which they may submit an application for initial planning funds. Such funds will be used to develop programs that will initiate and carry out new methods for bringing advanced diagnostic and treatment capabilities to that region. According to the law, when such plans have been made, application for funds to put these plans into practice through operational programs may be developed and submitted under the auspices of the same Regional Advisory Group.

The Division of Regional Medical Programs of the National Institutes of Health was created to administer the program. Shortly thereafter, it was announced that Dr. Robert Q. Marston would

resign as Vice Chancellor of the University of Mississippi and Dean of its Medical School to accept appointment as Chief of the Division and Associate Director of the National Institutes of Health.

NO Graduate Medical Sets March Meet

The 30th Annual Meeting of The New Orleans Graduate Medical Assembly will be held March 6-9, 1967, with headquarters at the Roosevelt Hotel.

Nineteen outstanding guest speakers will participate, and their presentations will be of interest to both specialists and general practitioners. The program will include 51 informative discussions on many topics of current medical interest, in addition to clinicopathologic conferences, symposia, medical motion pictures, round-table luncheons and technical exhibits.

For information concerning the assembly meeting write Secretary, The New Orleans Graduate Medical Assembly, 1430 Tulane Ave., Room 1528, New Orleans, La. 70112.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761

Michigan Dean Is New AAMC President

Dr. William N. Hubbard, Jr., was elected president of the Association of American Medical Colleges at the organization's 77th Annual Convention held at San Francisco in late October. Dr. Hubbard, a resident of Ann Arbor, Mich., is dean of the University of Michigan Medical School. He succeeds Dr. Thomas B. Turner, dean of the Medical Faculty, Johns Hopkins University School of Medicine.



Dr. Hubbard

Dr. Hubbard told a press conference that the United States is faced with a "revolution of rising expectations in medical care. The days of charity patients and double standard medicine for rich and poor are ending and the demand for doctors is increasing."

He said that medical schools which have functioned historically as research centers, are now digging into this problem with a "deep sense of responsibility for research in the organization of health care."

Cardiology College Sets Annual Meet

The American College of Cardiology will hold its 16th Annual Session Feb. 15-19, 1967 in Washington, D. C. The five days of scientific presentations on research and clinical advances will be held at the Washington Hilton Hotel.

Highlights of the session will include a panel discussion on "Controversies in Cardiology" and a symposium on space medicine. The controversies panel of national authorities will present opposing views on such topical subjects as revascularization of the heart, prophylactic digitalization, long-acting nitrites and polarizing solutions.

The space medicine symposium will focus on cardiovascular problems affecting both astronauts

and aquanauts and presentations by scientists on the effects of prolonged deep sea and outer space travel on the heart and blood vessels.

Other scientific features will include individual participations in demonstrations of electrocardiographic and computer diagnoses of heart disease.

The session will be a gathering place for national and international scientists and clinicians in the field of cardiovascular diseases. On Wednesday evening, Feb. 15, noted scientists from England, South Africa and other countries will present short papers on "Contributions of International Cardiology."

MSPB Opens New Headquarters Office

The Mississippi Society for the Prevention of Blindness, an affiliate of the national society, has announced the opening of a state headquarters office in Jackson, according to W. P. Woolley, president. Location of the new facility is 500-P East Woodrow Wilson Dr. near the heart of the medical center area.

Woolley said that the Mississippi society was organized in 1961 and conducts an active education program on the prevention of blindness. Included in the program, he said, are films and literature pieces. Program emphasis is on vision screening in preschool children and testing for glaucoma in adults who are 35 years of age and over.

The society is supervised by a board of directors and guided in its programs by a medical advisory committee.

EEG Society Sets June Continuation Course

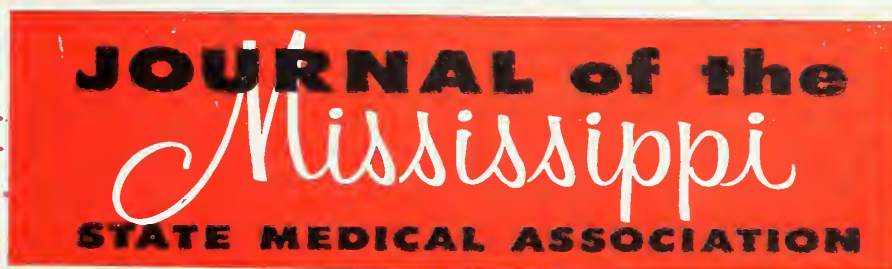
The American EEG Society has announced a continuation course in clinical electroencephalography to be conducted at Philadelphia, June 5-7, 1967. The second such course sponsored by AEEGS, it is aided by a grant from the Bureau of State Services of the U. S. Public Health Service.

Dr. Donald W. Klass of the Mayo Clinic is EEG course director for the society. He said that the June meeting was designed for physicians who have had little or no formal EEG training. Details and registration information are available from Dr. Klass at Rochester.

Volume VIII

Number 2

February 1967



- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
JAMES T. THOMPSON, M.D.
President
TEMPLE AINSWORTH, M.D.
President-elect
JAMES L. ROYALS, M.D.
Secretary-Treasurer
HOWARD A. NELSON, M.D.
Speaker
WILLIAM E. LOTTERHOS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

CONTENTS

ORIGINAL PAPERS

- Surgical Treatment
of the Cornea 61 J. WESLEY MCKINNEY, M.D.
- Injectible Diazepam:
A New Drug for the
Treatment of Tetanus 66 W. R. LOCKWOOD, M.D., and
F. ALLISON, JR., M.D.
- The Effect of
Potassium Ions on
the Nonspecifically
Abnormal T-wave 71 WILLIAM C. KELLUM, M.D.

SPECIAL ARTICLES

- Radiologic Seminar
LVIII 76 BERNARD T. HICKMAN, M.D.
- Clinicopathological
Conference LXXXV 78 University Medical Center

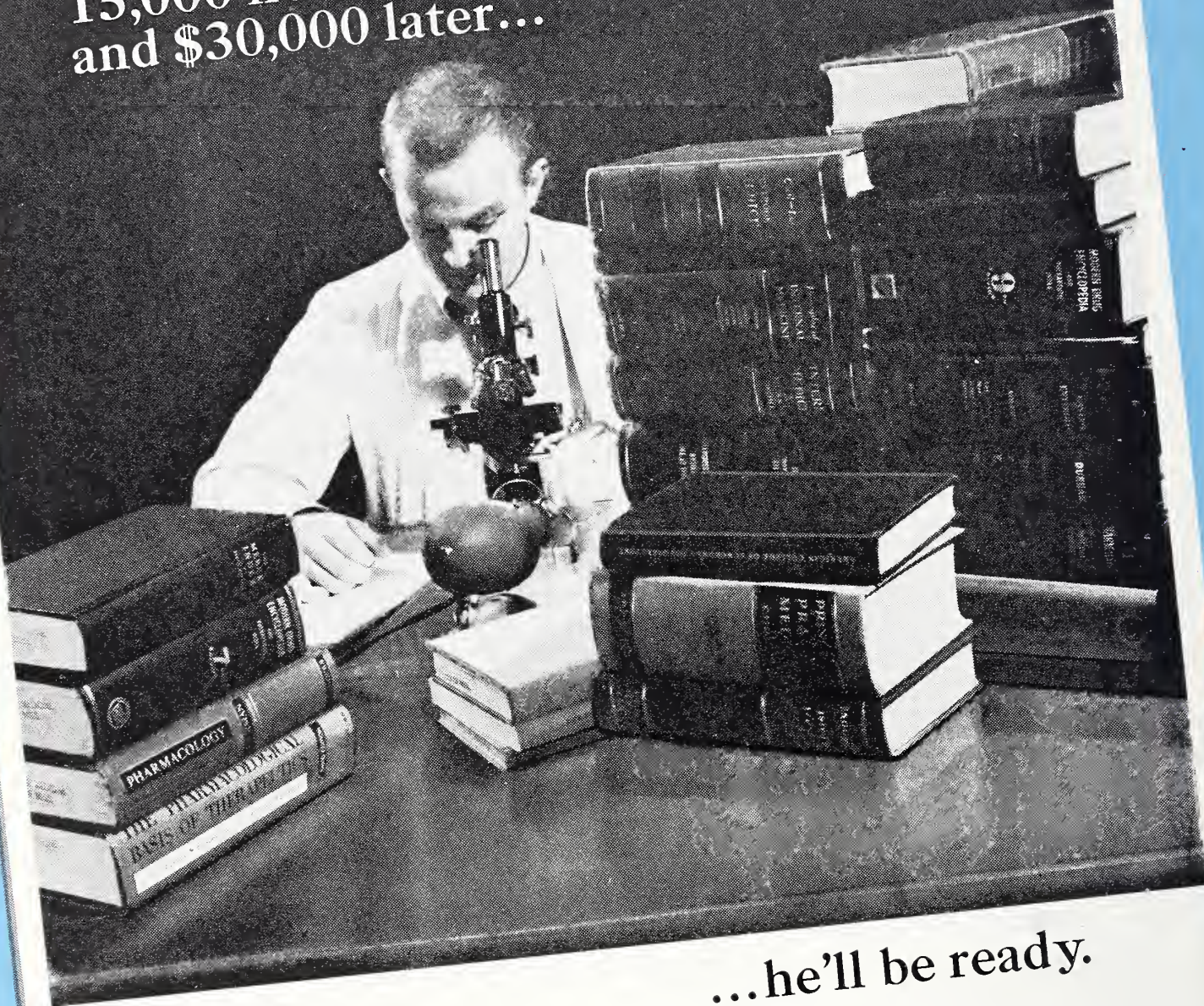
EDITORIALS

- The Challenge of
People: Key to the Care
of the Mentally Ill 87 JOHN J. HEAD, M.D.
- Drug Costs: Dosing
the Average American 92 Modest Expenditure
- Social Security? It's
Big Business 92 \$25 Billion a Year!

THIS MONTH

- Trustees and Councils 83 Quarterly Listing
- Meetings 84 1967 Menu
- The President Speaking 86 Health Careers
- The Literature 101 New Books Reviewed
- Medical Organization 107 News to the End of the Book

15,000 hours
and \$30,000 later...



...he'll be ready.

Fifteen thousand hours and \$30,000 later, this young man will be ready to practice medicine. Meanwhile, his life is a steady pattern of classes and endless study. When he's finally in practice, his study will continue, for he must keep himself informed on the constant advances being made in medical science. Today's doctor is better trained, better equipped than ever before. The cost of a medical education

is staggering . . . in terms of time *and* money. Little wonder, then, that the best in medical care costs more today than it did a few years ago—you *receive so much more*. Because Blue Cross-Blue Shield has kept pace with the rising costs of medical care, it too costs more today. But, dollar for dollar, it's still today's best coverage for medical and hospital bills.



This is one of a series of public service messages—sponsored by Mississippi Hospital and Medical Service, (Blue Cross-Blue Shield), Jackson, Mississippi—designed to highlight our state's hospital and medical progress.

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

February 1967

Dear Doctor:

Reversing a policy of years standing, the AMA Judicial Council has liberalized relations between medicine and optometry. New edict permits physicians to teach in optometry schools or even employ an optometrist to assist him, provided that the optometrist is identified to patients as such and not as an M.D. Under old policy, it was ethically taboo "to impart technical medical knowledge to nonmedical practitioners."

New stand was taken by Judicial Council at Las Vegas clinical convention but not brought before House of Delegates. Abandonment of hard line represents first easing of proscription in 12 years when House of Delegates adopted old policy.

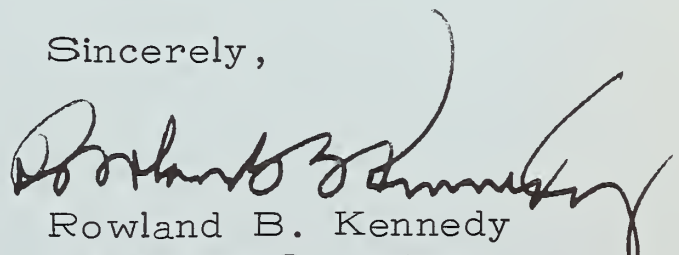
The National Disease and Therapeutic Index reports that the present winter season will be a mild one for influenza. NDTI, a statistical research organization on private practice, said that visits by physicians for flu in November 1966 equalled only 54 per cent of those in an average month. Previous low point in flu and URI was 1964.

Chicago's biggest fire since Mrs. O'Leary's cow kicked over the lantern destroyed the showcase McCormick Place convention center. AMA's 1966 annual convention was held there, and many major health and medical meetings were set for the 10 acre, \$40 million center. Next AMA meeting booked for Chicago is 1970.

Implementation of the Laboratory Animal Law has put the Department of Agriculture into the field of medical research. New law relates to licensing of animal dealers, shelters and holding compounds, food, and all aspects of humane care. Law will apply to nearly all aspects of animal usage in medical research and will be administered by Department of Agriculture.

Ten recent grants by U.S. Public Health Service under the Nurse Training Act of 1964 included funding of a construction program in Mississippi. The Mississippi Valley State College at Itta Bena will receive \$227,000 for a building to house its two year school of nursing. Biggest allocation went to University of Maryland for a \$1 million structure.

Sincerely,


Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

Cancer And Diabetes? Sam Has The 'Cure!'

Jackson - An energetic mail advertiser from Rolling Fork, Miss., identifying himself as Sam Bruce, offers his "cancer and sugar cure" for \$150 per gallon. To top it off, mailings are being sent to physicians. Confidently unburdened by scientific training, the advertiser even says his product is inspected by FDA. That's true, too, but for another purpose, as state medical association is informed that the concoction is low grade elderberry wine.

SSA Proposes Medicare Certification Regulations

Baltimore - Social Security Commissioner Robert M. Ball has submitted proposed regulations on certifying and recertifying Medicare patients for publication in Federal Register. Requirement, imposed by Public Law 89-97, is easily most controversial single aspect of Medicare. AMA has registered objections and is certain to oppose regulations. Ball side-steps issue of making a physician certify something he has already ordered by saying that neither a prescribed form is required nor is certification part of a claim for payment.

AMA Trustees Approve Advertising Program

Chicago - An institutional advertising program "designed to create a climate of opinion favorable to the AMA and private physicians" has been approved by the AMA Board of Trustees. Board minutes described campaign as explaining "the positive program benefiting the public." When initiated, the advertising will be the first since the "Eldercare" campaign.

Professional Liability Rates Skyrocket In Alaska

Fairbanks - The Governor of Alaska has ordered an investigation of professional liability insurance rates being charged to the state's physicians. After Alaska supreme court handed down a ruling apparently shifting the burden of proof in malpractice litigation from plaintiff to physician, many insurance companies withdrew from writing coverage. One physician's annual premium was raised to \$6,800 per year from \$977. The Governor charged that such rates were not in the public interest.

Mail-Order Laboratory Loses Suit Against TV Network

Portland, Ore. - A federal trial court dismissed a suit for damages for defamation brought by a medical laboratory doing business by mail against a major TV network. The court said that dismissal was based upon plaintiff's failure to state a cause for action. Allegation was that network defamed lab by claiming mail order facilities failed to diagnose specimens in test for bacterial infection and missed one out of four other tests. Citation is United Medical Laboratories v. Columbia Broadcasting System, Inc., 258 F. Supp. (D.C., Ore., Sept. 8, 1966).



ORIGINAL PAPERS

Surgical Treatment of the Cornea

J. WESLEY MCKINNEY, M.D.

Memphis, Tennessee

AT THE FIRST WORLD CONGRESS on the Cornea, held in Washington, D. C., in 1964, many ideas regarding surgery of the cornea were expounded by ophthalmologists from all over the world. Some of these ideas were new to me. Some of the new ideas I have tried and found wanting. Some have been helpful and are incorporated in this discussion.

For the purpose of this presentation I have reviewed 26 corneal conditions which may be amenable to surgery. Some of these will be presented in detail.

Recently, the flush fitting corneoscleral lens, which is molded to fit intimately every curve, and the contour fitting lens, which is molded to have 0.1 mm. clearance over every curve, have been used in the therapy of the corneal diseases. They give promise of replacing or being useful in connection with certain surgical procedures.

CORNEAL ULCERS

The active ulcer caused by pyogenic organisms carries no indication for surgery with the possible exception of the one which is advancing despite all medical treatment. In this instance a delimiting keratotomy, made as a short penetrating incision just ahead of the advancing ulcer, may be the means of finally arresting its progress.

A severe type of ulcer which has become more frequent with the widespread use of antibiotics and steroids is caused by a fungus. This ulcer is

characteristically slightly elevated with a plaque of dense infiltration in the stroma beneath it and surrounded by a halo and radiating lines.

The diagnosis is made by smears from scrapings of the ulcer and also cultures. These ulcers are persistent and do not respond to the ordinary antibiotics. Amphotericin B and Nystatin soaked into

Twenty-six corneal conditions which may be treated by surgery are reviewed by the author. Indications for surgery and results to be expected are discussed.

the ulcer by means of pledgets of cotton may finally cure some cases. We formerly thought that these ulcers could be excised and replaced by a corneal graft, but microscopic studies have shown that the fungus invades the cornea far beyond the visible ulcer and infiltration.

The most effective treatment for fungus ulcer is probably the conjunctival flap used as recently proposed by Kaufman.¹ The ulcer is thoroughly debrided of all necrotic tissue, the immediately surrounding epithelium is removed and the conjunctiva sutured to the cornea. Dissection of the conjunctiva is carried out through an incision 10 mm. or more behind the limbus in order to insure that no Tenon's capsule is included. This incision is not closed in order to prevent retraction of the conjunctiva from the cornea. It is supposed that the vascularity of the conjunctival flap is the curative factor in these ulcers. Finally, keratoplasty is

Read before the Section on Eye, Ear, Nose, and Throat, 98th Annual Session, Mississippi State Medical Association, Jackson, May 9-12, 1966.

performed after the ulcer has completely healed.

Treatment with IDU and IDU plus steroids is in vogue at the present time for dendritic ulcer. I am not convinced, however, that the old iodine treatment, if applied thoroughly, is not the quickest and surest method of treatment. It seems to me that the sooner the herpes virus is destroyed the less extensive will be the damage to the corneal nerves. It is common experience that the corneal sensitivity is greatly reduced long after the herpes virus can be demonstrated in the so-called meta-herpetic keratitis with its recurring erosions and scarring. This is in effect a localized superficial neuroparalytic keratopathy which may be preventable by prompt destruction of the virus. The last resort in the persistent superficial post-herpetic keratopathy is the lamellar keratoplasty (Figure 1). Presumably it is possible by excising the superficial layers of the cornea to place the graft in a bed of cornea containing nerves undamaged by the virus.

ULCERS OF UNCERTAIN ETIOLOGY

Torpid ulcer is merely a descriptive term for the persistent ulcer of uncertain etiology which may occur spontaneously or in association with neuroparalytic or bullous keratopathy or corneal graft breakdown. There is often a minimum of infiltration and sometimes the cornea seems to be melting away in the depths of the ulcer to the point that perforation is feared. Three methods of treatment may be employed in these cases. A molded flush-fitting contact lens may be used. The lens fits the cornea snugly and a nub of

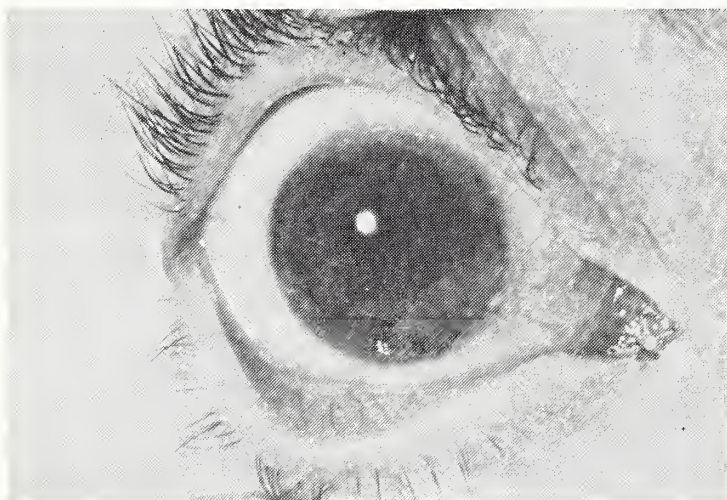


Figure 1. Lamellar keratoplasty for persistent herpes of cornea.

plastic actually fits into the ulcer. As the ulcer fills in, the lens must be altered. If the ulcer is peripheral, a thin conjunctival flap may be sutured

over the ulcer as previously described. If the ulcer is central, a lamellar corneal graft may be sutured over the ulcer. The graft is to be removed after the ulcer has filled in. In this case a penetrating corneal graft may be necessary later for visual purposes.

A descemetocele, a frightening complication of a corneal ulcer, is treated usually by conjunctival

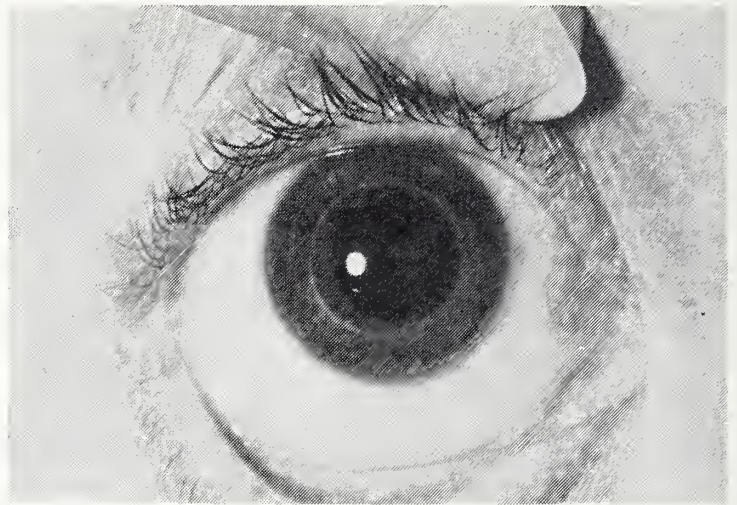


Figure 2. Corneal transplant for keratoconus.

flap or overlaid lamellar graft as described for the torpid ulcer. Cicatrization will take place beneath the conjunctival flap or overlaid graft. Penetrating keratoplasty can be done later under more favorable circumstances. Some cases, however, may require only a contact lens and others may be treated by optical iridectomy. Occasionally, if an eye is available, a primary penetrating graft is the treatment of choice.

KERATOCONUS

Keratoconus, a progressive thinning and protrusion of the central portion of the cornea, first appears in the second and third decade of life and shows varying degrees of progression until about age 40. Beyond that age there is rarely any progression. This is a comforting prognostic fact for some keratoconus patients. The irregular astigmatism and later apical scarring reduce vision markedly. In the early stages of keratoconus the ordinary scleral or corneal contact lens will counteract the astigmatism and give good vision. It is probable, however, that the contour fitting contact lens should be employed from the beginning in some cases. This lens is readily changed as the condition progresses. It is a great mistake, however, to continue fitting contact lenses until the conification is marked, requiring the larger grafts with their greater tendency to complications and high degree of postoperative astigmatism. In general, corneal transplantation carries a favorable prognosis in keratoconus (Figure 2). We expect

20/30—20/20 vision after keratoplasty in the great majority of these cases.

The granular, macular, lattice and rarer types of hereditary dystrophy tend to be more or less progressive and are not amenable to medical treatment. Penetrating keratoplasty offers a good prognosis in these cases when vision has been reduced to the point of incapacitating the patient. (See Figure 3.)

Marginal dystrophy with its thinning of the peripheral cornea may require a complete or partial doughnut lamellar keratoplasty to prevent increasing astigmatism and even perforation of the cornea. Extreme care must be exercised in dissecting these thinned corneas. Contour fitting contact lenses may be of great benefit in the early stages of this condition.

FUCH'S DYSTROPHY

Fuch's dystrophy, an endothelial-epithelial dystrophy, is to be considered in a different category from hereditary dystrophies. Heredity can rarely be pinpointed. It begins as a cornea guttata or excrescences on Descemet's membrane beginning in the center of the cornea. The endothelial dystrophy occurs in 6 per cent of women past 20 years of age and not more than 1 per cent of men. In

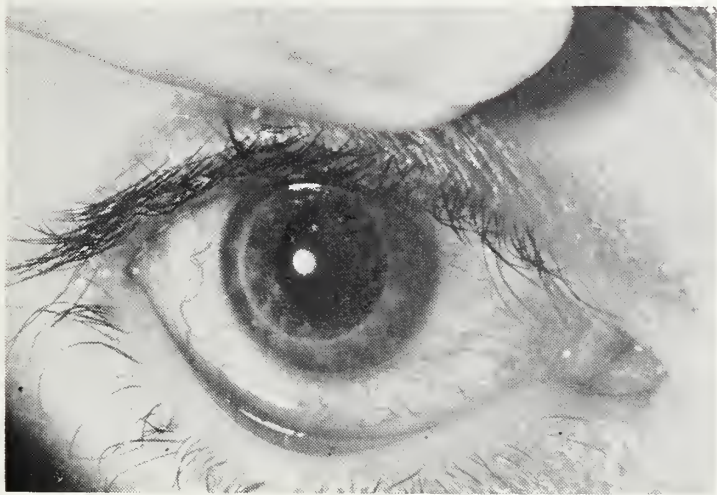


Figure 3. Corneal transplant for macular dystrophy.

later years the excrescences produce a breakdown of endothelium and infiltration of aqueous into the stroma and epithelium. The edema produced is confined to the center of the cornea at first, but in time spreads to the periphery. No medical treatment arrests the progress of the disease. Glycerin drops or a warm stream of air from a hair dryer will often temporarily extract fluid from the cornea and clear the vision.

Once the epithelium is involved in edema a penetrating keratoplasty is usually sooner or later required. It was formerly thought that the dystrophy always involved the graft, but we now

know the results were unfavorable because the transplant was not done until the epithelial edema was extensive, indicating destruction of the all important endothelium. It is therefore extremely

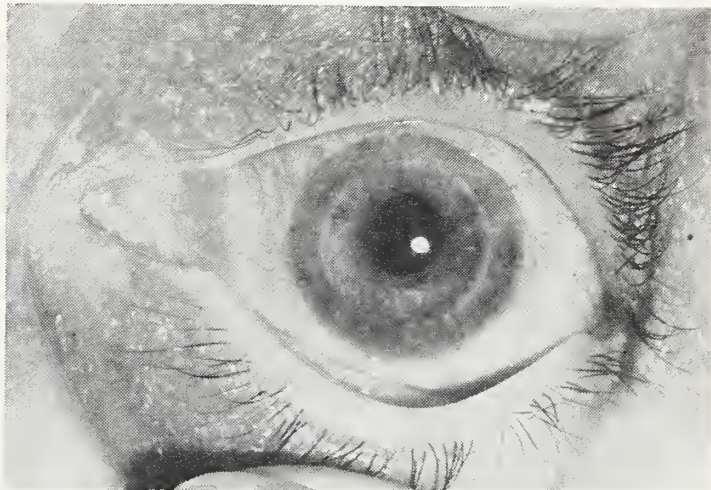


Figure 4. Corneal transplant for endothelial dystrophy prior to cataract extraction.

important to watch these cases carefully. Keratoplasty should be done not later than when the central disk of epithelial edema has attained a diameter of 5 mm. Until then the prognosis for a permanently clear graft is usually good.

CATARACT CASES

It is not infrequent to find endothelial dystrophy of the cornea in a case wherein cataract extraction is contemplated. If the excrescences of Descemet's membrane are not extensive and if no damage to the endothelium occurs during the extraction or if there is no subsequent vitreous contact with the cornea, the dreaded permanent edema or aphakic dystrophy of the cornea will not occur. There is nothing so disheartening as having a well done cataract extraction to initiate a full blown Fuch's dystrophy. If the endothelial dystrophy is marked with or without stromal edema, there is no question but that a corneal transplantation should be done before the cataract is extracted, but many cases are borderline and present a real dilemma. In this case it has been my practice to remove the cataract hopefully from the worst seeing eye. If Fuch's dystrophy does not develop, then the cataract extraction in the second eye may be done with reasonable expectation that the outcome will be the same. If, however, Fuch's dystrophy of the first eye ensues, a corneal transplantation is performed prior to cataract extraction in the second eye (Figure 4).

It should be pointed out that all is not necessarily lost if aphakic dystrophy occurs, since we have now learned to overcome certain difficulties of doing a keratoplasty on an aphakic eye. Many

aphakic cases are now successfully operated upon. Failing this, a prosthokeratoplasty can be performed using the Cardona or Dohlman type of visual plastic prosthesis.

BULLOUS KERATOPATHY

This type of keratopathy is characterized by large bullae of the epithelium which break down to expose corneal nerves. It occurs commonly in absolute glaucoma, old iridocyclitis and after injuries. In some of these, only enucleation will give relief from pain. In others a little vision may remain but a corneal transplantation would not result in a clear graft. In this case a simple superficial keratotomy will give complete relief from pain. In my experience the superficial keratotomy is superior cosmetically and visually to the Gunderson flap and much simpler to perform. The recently advocated deep keratotomy and full thickness corneal graft is much more hazardous and no more effective than the simple superficial keratotomy. At the recent Argentine Congress of Ophthalmology, Salleras² and several panelists reported that the use of surface diathermy stopped the formation of bullae and relieved the discomfort of bullous keratopathy. This is certainly a simple procedure. It might be objectionable to some patients if much scarring were produced.

Another type of bullous keratopathy results from the contact of vitreous with the cornea following cataract extraction. Contact of the vitreous mushroom with the cornea produces an irritable eye but not always a keratopathy. At the first signs of keratopathy, vitreous should be removed through an incision in the pars plana and air in-

jected into the anterior chamber. Delay in carrying out this procedure invariably leads to a spread-

ing keratopathy. Formed vitreous against the cornea in some cases is noted to retract from the cornea slightly when the pupil is dilated, but returns to corneal contact when the pupil again contracts to normal. In this situation it is probable that the vitreous is adherent to the iris, and it may be necessary to excise the formed vitreous mushroom. This is done by passing the DeWecker scissors through a small limbal incision to cut the vitreous just in front of the constricted pupil. The freed vitreous is extracted, the preplaced suture in the limbal wound tied and air injected into the anterior chamber. Boyd³ reported retraction of the vitreous mushroom from the cornea produced by application of the cryophake to the cornea at 40° c for 45 seconds. Unfortunately, epithelium, corneal corpuscles and, more seriously, endothelial cells are destroyed.

Occasionally a crescent of bullous keratopathy beneath the upper limbus is discovered months or years after an uncomplicated cataract extraction. In these cases the vitreous has become attached to the wound itself or to damaged endothelium immediately below it. These adhesions may sometimes be removed from the cornea by goniotomy knife and followed by removal of a small amount of vitreous through the pars plana and air injection. I now believe, however, that in order to arrest the progress of the keratopathy it is best to perform a superficial keratotomy in the area of the keratopathy and to suture a thin conjunctival flap into the defect. The flap brings in blood vessels and arrests the progress of the keratopathy which would otherwise spread to the rest of the cornea. (See Figure 5.)

In all keratopathies, if other measures fail and if there is reason to believe that the posterior segment of the eye is relatively intact, a prosthokeratoplasty may be done as a last resort with the prospect of restoring vision to an otherwise hopelessly blind person.

There are several conditions of the cornea which I should like to mention briefly.

Some old scars and band keratopathy contain calcium. These deposits of calcium cause erosion of the epithelium and constant or recurring pain. Much relief may be obtained by removing the epithelium, scraping and dissolving out the calcium by a corneal bath of E.D.T.A.

Neuroparalytic keratitis and exposure keratitis, together with intractable trichiasis may be benefited by contour fitting contact lenses.

The symblepharon associated with pemphigus and Stevens-Johnson's disease may be prevented by the use of flush fitting contact lenses after the acute stage has passed. If already formed, the



Figure 5. Two months after keratotomy and conjunctival flap above for bullous keratopathy following cataract extraction.

jected into the anterior chamber. Delay in carrying out this procedure invariably leads to a spread-

adhesions may be divided and recurrence prevented by the use of these lenses. These lenses also protect the cornea from the effects of these diseases.

Severe cases of keratoconjunctivitis sicca may be treated with contour fitting contact lenses which prevent evaporation of the available tears. But occlusion of the lower puncta with the diathermy needle gives such dramatic and complete restoration of corneal clarity and relief of the great discomfort of the advanced case of this disease that I believe it is still the procedure of choice.

Tumors of the cornea for the most part begin at the limbus. A simple excision is usually all that is required. The most frequent exception is the squamous cell epithelioma which responds readily to radiation therapy. Positive identification of this lesion should always be made by excisional biopsy.

Finally I should like to discuss our common problem, the pterygium, especially the prevention and treatment of recurrence. Many operations have been devised for pterygium in an attempt to prevent its recurrence. The McReynolds operation and variations of the bare-sclera technique have been the most popular. Both are good but have the disadvantage of delayed healing which prolongs the postoperative course unnecessarily. In order to avoid the burying of surface epithelium

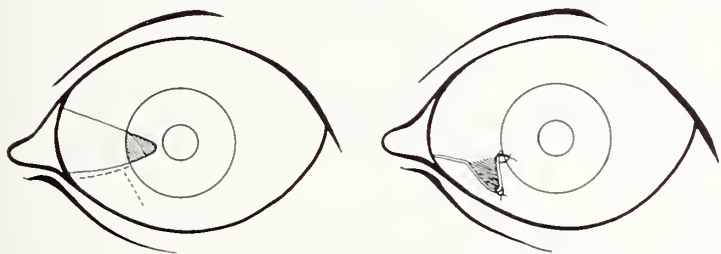


Figure 6. Left, shaded area indicates pterygium dissected from cornea. Broken line indicates incision in conjunctiva. Right, shaded area indicates pterygium fitted into separated vertical incision. Note sutures and no burial of head of pterygium.

I have used the following procedure for many years.

The pterygium is dissected from the cornea in the usual manner and stiff corneal tissue removed from beneath the head (Figure 6). A horizontal incision is made in the conjunctiva along the lower border of the pterygium with scissors. A vertical incision is made downward from the horizontal incision 2-3 mm. from the cornea, in length to approximate that of the dissected pterygium (Figure 8). The edges of the vertical incision are separated to form a V into which the head of the pterygium is fitted. Only two 6-0 single armed sutures are used. The first unites the corneal side of the pterygium with the tip of the corneal arm

of the V on the horizontal incision. The corneal border of the pterygium now lies contiguous to the limbus or if desired a small area of sclera may be left bare. This technique is merely a modification of the McReynolds operation with the avoidance of burying epithelium.

The sutures are removed in one week if they have not already come out. Healing is very rapid with this procedure.



Figure 7. Lamellar keratoplasty for recurrent

It is not uncommon to notice that a few superficial blood vessels have grown in to partially cover the area of the removed pterygium. This does not constitute a recurrence of the pterygium unless another definite head develops. Even so these blood vessels with their attendant fibrous tissue are disfiguring, if the removed pterygium was large. I have, therefore, made it a practice to apply beta radiation at the limbus at one week and again at the second week after the transplantation of large pterygia. If there is a definite recurrence, the pterygium must again be removed and beta radiation is applied for three times at weekly intervals. Radiation to the new forming vessels is extremely effective.

An occasional case is seen which has been operated upon several times, even to the point of having extensive symblepharon. These require a lamellar keratoplasty (Figure 7) to prevent recurrence and in some cases a free graft of conjunctiva from the other eye in addition to restore the motion of the globe restricted by the adhesions to the lids.

★★★

130 Madison Ave. (38103)

REFERENCES

1. Kaufman, H. E., and Wood, R. M.: Mycotic Keratitis, *Am. J. Ophth.* 59:993, 1965.
2. Salleras, A.: Surface Diathermy for Bullous Keratopathy, *Memories of the VIII Argentine Congress of Ophthalmology* (to be published).
3. Boyd, B.: Cryotherapy for Vitreous Contact with Cornea in the Aphakic Eye, *Memories of the VIII Argentine Congress of Ophthalmology* (to be published).

Injectable Diazepam: A New Drug For the Treatment of Tetanus

W. R. LOCKWOOD, M.D., and F. ALLISON, JR., M.D.
Jackson, Mississippi

CONTROL OF THE MUSCULAR rigidity and convulsive spasms of generalized tetanus is difficult to achieve but is essential for salvage of patients ill with this disease. Although several drugs have been advocated for this purpose, each has had at least one or more serious shortcomings.¹ Recently a new preparation, diazepam (Valium), has received limited use in the treatment of tetanus,²⁻⁶ and the results have been encouraging. When diazepam was administered either intramuscularly or intravenously in doses that caused no serious side effects, it was found to control muscle spasm adequately.

It is the purpose of this paper to describe three patients ill with tetanus that were treated with injectable diazepam. In general, our findings agree with the results of others and indicate that diazepam should be studied further in the treatment of tetanus.

CASE 1

A 22-year-old male was in good health until Nov. 1, 1964, when, while drunk, he fell on a gravel road and cut his thumb. The laceration was cleaned by his personal physician and 1,500 units of tetanus antitoxin (equine) were given. Six days later the wound began to drain purulent matter. The following day the patient's neck became stiff and he had difficulty in opening his mouth. A diagnosis of tetanus was made and the thumb was amputated through the distal interphalangeal joint. After 50,000 units tetanus antitoxin (equine), 1,000 units human antitetanus globulin, 120 mg. phenobarbital, and 600,000 units of procaine penicillin G were administered, he was sent to the University Medical Center.

On arrival the patient was conscious but extremely ill with marked nuchal rigidity, extreme

opisthotonos, severe trismus, frequent generalized muscle spasms, and profuse diaphoresis. In addition, the muscles of the extremities and the trunk were rigid with tenderness to palpation of the abdominal wall. The vital signs revealed a blood pressure of 170/110, a temperature of 101° F (rectal), a respiratory rate of 20 per minute and a pulse rate of 120 per minute. The remainder of the physical examination was unremarkable except for the amputation wound.

Several drugs have been advocated for the control of the muscular rigidity and convulsive spasms of generalized tetanus, but each has had one or more serious shortcomings. The authors discuss the use of diazepam, a new tranquilizer-relaxant, and present three cases.

Hematologic studies revealed a white blood cell count of 13,000 per cu. mm., a hematocrit of 45 per cent and a hemoglobin value of 14.5 gm. per cent. Serum glucose, calcium, potassium, sodium, carbon dioxide combining power, and chloride values were within normal limits. The cerebrospinal fluid was found to be under increased pressure, but it was free of cells, and the glucose and protein levels were within normal limits. Aside from a 1+ proteinuria, the urinalysis was negative both microscopically and chemically.

Immediately after hospitalization a tracheostomy was performed to preserve integrity of the airway and the stomach contents were evacuated by nasogastric suction to prevent aspiration. A retention catheter was inserted into the bladder. During the first 24 hours after hospitalization, he received 50,000 units tetanus antitoxin (equine), 0.5 cc. tetanus toxoid, 200 mg. pheno-

From the Infectious Disease Division of the Department of Medicine and the Department of Microbiology, University of Mississippi School of Medicine.

barbital, 200 mg. promazine, and 50 mg. chlorpromazine. All were given intramuscularly. In addition, during this first day 10 mg. of diazepam was given intramuscularly every three hours, but because muscle spasm continued, the dose was increased to 20 mg. every three hours for a total of 80 mg.

Although the patient became deeply anesthetized, the muscle spasms continued. During the second hospital day, intramuscular diazepam, 20 mg. every three hours, was continued, but control of muscle spasm was still inadequate, and an additional 20 mg. of diazepam was given intravenously every six hours. Administration of promazine and phenobarbital was continued. The muscle spasms were stopped by the end of the second hospital day. On the third day approximately the same dosage schedule for the three medications was maintained, but a brief hypotensive episode occurred after a total of 60 mg. of diazepam had been given intravenously.

OTHER LABORATORY FINDINGS

At this point the blood urea nitrogen (BUN), creatinine, and serum glutamic oxalacetic transaminase (SGOT) values were found to be elevated. It was also noted that the urine appeared green, and the hospital laboratory reported a 4+ hemoglobinuria. (The following morning the Research Laboratory of the Division of Renal Diseases failed to detect a green pigment or hemoglobin in the urine.) Even though intravenous injections of diazepam were stopped, the patient remained relaxed and free of spasm.

On the fourth hospital day the diazepam dosage was reduced to a total of 160 mg. The dose of phenobarbital by the intramuscular route was 630 mg. and that of promazine was 100 mg. The muscle spasms were completely controlled, but he remained unconscious, and it was apparent that he was over-sedated. Accordingly, on the fifth hospital day administration of promazine and phenobarbital was stopped.

During the fifth, sixth, and seventh days the diazepam was reduced steadily so that by the eighth day he received only five mg. of this drug. During this period he slowly recovered from the effects of over-sedation and concurrently, the BUN and creatinine values returned to normal levels. On the seventh and eighth days when the drugs were abruptly decreased and again when the diazepam was finally stopped, profuse salivation and alarming quantities of pulmonary secretions were noted. Atropine, 3 mg. intramuscularly, relieved these symptoms.

On the ninth hospital day he began to have mild to moderate generalized muscle spasms again. The diazepam was increased to 10 mg. intramuscularly every six hours with good results. During the remaining nine days of treatment the dose of diazepam was slowly reduced. He improved steadily and experienced only occasional spasms. It should be noted that 16.6 million units of procaine penicillin G were given during the first 16 days.

UNEVENTFUL RECOVERY

Subsequently the patient's recovery was uneventful. Active immunization was completed with further injections of tetanus toxoid. The blood pressure remained elevated, but he was well otherwise.

Leucocyte counts, hemoglobin and hematocrit values, and urinalysis were checked regularly. In addition, the levels of the serum electrolytes, SGOT, serum proteins, bilirubin, BUN, creatinine, and the prothrombin activity were followed. Only the BUN, creatinine and SGOT values were abnormal as was discussed above. On three occasions urinalyses were reported to show hemoglobinuria but this finding was not confirmed by the Research Laboratory of the Division of Renal Disease.

The patient just described had severe generalized tetanus. It is apparent in retrospect that he was over-sedated during the first three or four days of treatment. The sustained muscle contractions were easier to relieve than were the convulsive spasms. The etiology of the episode of shock cannot be stated with certainty because large doses of three different drugs known to have vasodepressive effects were being given simultaneously. After the seventh day, the tetanus was managed with diazepam alone, although rather large doses were required for an additional week.

CASE 2

A 29-year-old woman had a spontaneous abortion approximately one month prior to her admission here. She had missed only one menstrual period. The size of the fetus was not recorded.

There was no history of trauma of any type, and there was no reason to suspect criminal abortion. Otherwise, she had been in excellent health until two days prior to hospitalization when her neck became stiff. The following day when she began to have opisthotonos followed by inability to open her mouth, she was referred to the University Medical Center. Lumbar puncture was done by her private physician and no cells were found.

The blood pressure was 200/80, the pulse was 120 per minute, and the rectal temperature was 103° F. She appeared acutely and critically ill with generalized muscle spasm induced by noise or motion. There was marked trismus, a stiff neck, and profuse diaphoresis. The lungs were clear and the heart was normal. The remainder of the physical examination was unrevealing. Pelvic examination was not recorded.

Treatment was begun with large doses of tetanus antitoxin and penicillin. Five milligrams of diazepam were given intravenously and produced sufficient relaxation for a tracheostomy to be done under local anesthesia, although in addition, 500 mg. of amobarbital was given intravenously. During the next six hours the patient was given five mg. of diazepam intravenously every two hours for a total of 20 mg. For several hours it seemed that her condition was well controlled but seven hours after hospitalization, the temperature rose rapidly to 108° F (rectal) accompanied by a fall in blood pressure and despite treatment with vasopressors, ice water and alcohol sponges, a refrigerated blanket and artificial respiration, she expired a few hours later. An additional five mg. of diazepam was given intramuscularly during this time.

Autopsy was performed and pertinent to this report were the findings in the uterus which showed a necrotizing endometritis. Anaerobic cultures of the endometrium were prepared and from a mixed bacterial flora, *Clostridium tetani* was recovered.

This woman had severe rapidly progressive, generalized tetanus. The site of infection was the postpartal uterus. In addition, she may have had endotoxemia from the infected uterus but bacteremia was not found. Although the disease was severe, good muscle relaxation was achieved with small doses of diazepam.

CASE 3

A 74-year-old man came to the emergency room because his right foot had been gangrenous for about two weeks. He had experienced intermittent claudication for about one year. There was no history of diabetes. Pertinent physical findings were gangrene of the right foot with cellulitis extending to the right knee. No pulses were felt in the right foot. Because skin testing for sensitivity to horse serum was positive, tetanus antitoxin was withheld and he was given only 0.5 cc. of tetanus toxoid. On the day of admission to the hospital the right lower extremity was ampu-

tated through the mid-thigh. The immediate postoperative course was uneventful, and he was discharged two days later to be followed in the outpatient department.

Three days later the patient returned to the emergency room and stated that he was unable to open his mouth and that his neck was stiff. The family reported that it had been necessary to pry open his mouth in order to feed him. Clonic motions of the arms had been observed on several occasions, but neither muscular rigidity nor opisthotonos had been noted.

VITAL SIGNS

When examined, the vital signs included a blood pressure of 150/90, a pulse of 100 per minute and a temperature of 100.8° F (orally). The patient appeared well developed and well nourished, but he was lethargic and responded slowly to questions. There was profuse diaphoresis. The jaws were held tightly shut and could not be forced open by using moderate pressure with a tongue blade. The teeth were broken and rotten and the gums were infected. The neck was stiff and resisted lateral motion, flexion, and extension. His abdomen was flat and tense. There was marked paraspinal muscle spasm. The stump of the right leg was well healed. No pathological reflexes could be elicited and the neurological examination was unremarkable.

Studies of the blood revealed a hemoglobin of 9.3 gm. per cent, a hematocrit of 28 per cent, and a white cell count of 17,500 per cu. mm. Urinalysis was within normal limits except for 1+ protein. Chemical studies of the blood were as follows: BUN 144 mg. per cent, chloride 106 mEq/l, carbon dioxide combining power 27 mEq/l, glucose 144 mg. per cent, potassium 5.2 mEq/l and sodium 153 mEq/l. The cerebrospinal fluid contained 45 mg. per cent protein and 106 mg. per cent glucose with 4 red blood cells per cu. mm. and no white cells.

Treatment was begun with penicillin, 15 million units intravenously per day, and human antitetanus globulin, 250 units intramuscularly. In addition, he received 0.5 cc. tetanus toxoid intramuscularly. The following day, an additional 5,000 units of human antitetanus globulin was administered intramuscularly. Diazepam was begun in a dose of 5 mg. intravenously every six hours. That regimen produced good relaxation and was continued for seven days for a total of 22 or 23 injections. Then, diazepam was decreased to 2.5 mg. every six hours for 11 doses and subsequently to 2.5 every 8 hours for six doses. A total of 155

mg. of diazepam was given. He received 15 million units of penicillin G intravenously per day for seven days, 10 million units per day for four days and no other medications.

Shortly after diazepam was given, the muscle spasms decreased and resulted in a brief relaxation of the floor of the mouth to such an extent that the tongue fell back into the patient's oropharynx. No respiratory difficulty resulted from this. The patient improved slowly and after 10 days of therapy he was alert, cheerful, and talkative. The body temperature returned to normal by the fourth hospital day and remained so throughout the remainder of his hospitalization.

Serial laboratory studies as described in the first case of this report revealed no abnormalities associated with diazepam administration. This patient had mild tetanus and could be managed easily with diazepam alone. A tracheostomy was not required and no difficulties were encountered.

DISCUSSION

The treatment of tetanus is discussed in detail elsewhere.¹ This report is only concerned with the relief of the muscle spasms and of the generalized muscle rigidity. The regimens that currently receive widest recommendation for use in this disease involve the use of either the barbiturates, meprobamate, or methocarbamol (Robaxin)¹ in conjunction with promazine or chlorpromazine. Serious difficulties have been associated with each of these programs.

The best known problem is associated with the barbiturates where the level of drug required to relieve muscle spasm and produce generalized relaxation is large and always induces anesthesia of such depth that constant expert nursing care is required. On the other hand, excessive sedation is less of a problem when meprobamate is used, especially when promazine is given concurrently. Unfortunately, however, meprobamate for injection must be dissolved in propylene glycol and cannot be used intravenously. As a result, the large volume that must be injected intramuscularly to deliver the required dose occasionally causes necrosis of muscle.

Methocarbamol like meprobamate gives good relaxation without rendering the patient unconscious, and it has the advantage of being readily available in a preparation that can be given intravenously. Thus, methocarbamol overcomes some of the problems encountered when the barbiturates or meprobamate are used, but as in the case of the other two preparations large doses of it are required at frequent intervals and unpublished observations made in this hospital indicate that hema-

tologic, gastrointestinal, and renal complications are associated with the use of this drug.

Therefore, search for safer and more effective relaxants has been continued. This report describes our initial experiences in the use of injectable diazepam, a new drug of the benzodiazepine class with potent tranquilizing and muscle relaxing properties.²⁻⁶ In the limited number of patients with cases of tetanus that have been treated with this drug,³⁻⁶ there has been general agreement that diazepam gives good muscle relaxation although its value in control of the convulsive spasms of tetanus has been questioned.⁵ The potential usefulness of this preparation is heightened by the paucity of reported side effects and toxic reactions.

LARGE THERAPEUTIC INDEX

The doses used in Case 1 described above indicate that the therapeutic index is large. Substantial amounts of phenobarbital and promazine were given concurrently, and it is apparent that the patient was over-sedated. Two problems were encountered, but neither caused serious difficulty. A brief period of hypotension occurred on the third day of treatment. Simultaneously, a green material that was not identified appeared in the urine. Following the hypotension, the BUN rose to 60 mg. per cent, the creatinine to 5.3 mg. per cent and the SGOT increased from 282 units to 480 units. These values subsequently became normal when the drug doses were reduced. Over-sedation was the apparent cause of the hypotension and the subsequent derangement of the BUN, creatinine, and SGOT. It should be pointed out, however, that the precise role diazepam played could not be determined because in addition to 340 mg. diazepam, he had received 500 mg. promazine and 560 mg. phenobarbital.

The other problem arose when the diazepam dosage was abruptly decreased on the third day and again when it was stopped. Both of these occasions were complicated by excessive salivation and profuse pulmonary secretions. Atropine readily controlled this problem. Again, it is impossible to state whether or not withdrawal of diazepam and the appearance of excess secretions were directly related.

EFFICACY OF AGENT

The effectiveness of diazepam was well illustrated in the same case. After the patient recovered from the effects of over-sedation, symptoms of tetanus recurred. Both the muscle spasm and the rigidity were well controlled by diazepam alone and the other drugs were not used again.

The young woman described in Case 2 was extremely ill with overwhelming tetanus, yet small doses of diazepam were adequate to induce muscular relaxation and stop the spasms, although she died of her disease. The old man described in Case 3 had very mild tetanus, and his muscle spasms responded readily to small doses of diazepam.

In Cases 2 and 3 no problems were encountered that could have resulted from the diazepam.

On the basis of the limited clinical experience that had been reported, it was apparent that diazepam deserved further trial in the treatment of tetanus, although only one series was controlled by having paired cases.⁵ This conclusion was reinforced by our initial experience which also indicated that this drug was a potent muscle relaxant and was highly satisfactory as an agent for the management of generalized tetanus. Rather large doses may be required, as Case 1 illustrated and as Hendrickse and Sherman⁵ have reported, but complications attending use of diazepam have been minimal and easy to control.

SUMMARY

Diazepam, a new tranquilizer-relaxant, was given to three patients with generalized tetanus in the effort to achieve control of muscular spasm without the complication of excessive sedation. One patient died shortly after hospitalization from rapidly progressive tetanus and did not receive

an adequate trial. A second patient, with severe tetanus, was over-sedated initially from a combination of drugs including diazepam but subsequently responded well to moderate amounts of diazepam alone. The third patient, with mild tetanus, was easily regulated with diazepam as the only muscle relaxant. No serious complications resulted from fairly extensive parenteral administration of this agent. Although the experience was limited in scope, the favorable clinical response suggested that additional well controlled clinical trials are needed. ★★★

2500 North State St. (39216)

Supported in part by Training Grant T1-AI-290-01 from the U.S.P.H.S.

REFERENCES

1. Rose, H. M., in Cecil-Loeb Textbook of Medicine, ed. 11, Beeson, P. B. and McDermott, W. M., eds., Philadelphia, W. B. Saunders, 1963, p. 231.
2. Randall, L. O.; Heise, G. A.; Schallek, W.; Bagdon, R. E.; Banziger, R.; Boris, A., and Abrams, W. B.: Pharmacological and Clinical Studies on Valium (T.M.): A New Psychotherapeutic Agent of the Benzodiazepine Class, *Current Therapeutic Research* 3:405, 1961.
3. Shershin, P. H., and Katz, S. S.: Diazepam in the Treatment of Tetanus: Report of a Case Following Tooth Extraction, *Clin. Med.* 71:362, 1964.
4. Weinberg, W. A.: Control of the Neuromuscular and Convulsive Manifestations of Severe Systemic Tetanus: Case Report with a New Drug, Valium (diazepam), *Clin. Pediat.* 3:226, 1964.
5. Hendrickse, R. G., and Sherman, P. M.: Therapeutic Trial of Diazepam in Tetanus, *Lancet* 1:737, 1965.
6. Moriarty, J., and Bertolotti, L.: Control of Tetanic Spasms with Diazepam: Case Report of Severe Tetanus, *J. M. Soc. New Jersey* 62:403, 1965.

COOL FIX

The U. S. Customs Service has nominated as smuggler of the year the fellow who nonchalantly strolled across the border from Mexico licking an ice cream cone. It was found to contain half an ounce of pure heroin.

The Effect of Potassium Ions on the Nonspecifically Abnormal T-wave

WILLIAM C. KELLUM, M.D.

Tupelo, Mississippi

THE NONSPECIFIC T-WAVE abnormality in the electrocardiogram has been perplexing to the internist since the instrument came into use. This abnormality may be described either as a lowering or inversion of the T-wave in the leads where it is normally and positively upright. The physician is at a loss to explain the abnormality adequately when it is observed in a patient who is otherwise found normal as to medical history and physical examination.

The importance of the history and physical examination in such cases is emphasized. They should be considered as being of greater significance than nonspecific changes discovered in laboratory studies.

In 1962, Wasserburger and Corliss reported their findings during studies of the effect of oral potassium salts on the nonspecifically abnormal T-wave. At the Ochsner Foundation Hospital and Clinic at New Orleans, where the author was then a fellow in cardiology, patients with nonspecifically abnormal electrocardiograms had been observed. Stimulated by the Wasserburger and Corliss studies, the investigation was continued with modifications.

Accepting as valid the Wasserburger and Corliss postulate that potassium salts do not alter the organically abnormal T-wave of the electrocardiogram, we undertook studies of the effects of potassium salts on the borderline abnormal electrocardiogram. The investigation was conducted under the direction of Drs. H. Horack and Charles B. Moore of the department of cardiology.

Apart from demonstrating a nonspecifically abnormal electrocardiogram, patients admitted to the Ochsner studies met these prerequisites: The individual must have had a NPN below 50 or an equivalent level of BUN determination. Addition-

ally, each must have had adequate renal function and no evidence of congestive heart failure.

Each patient studied was given an equivalent of 96 mEq potassium ion prepared in the following manner: 5 gm potassium citrate and 5 gm potassium bicarbonate in 30 cc water. This was given one and one-half hours after the noon meal with the patient in a recumbent and resting position.

Studies by the author and his colleagues at the Ochsner Foundation Hospital and Clinic, stimulated by those of Wasserburger and Corliss, showed that the nonspecifically abnormal electrocardiogram, in the absence of heart disease, can be made to revert to normal in instances by ingestion of potassium salts. Thus, the potassium loading study can be of help to the clinician in differentiating nonspecific T-wave abnormalities from those caused by organic heart disorders. Cases from the studies are presented to illustrate the findings.

Prior to administration of the potassium salts, a control electrocardiogram was obtained. After ingestion of the preparation, the patient was hyperventilated for 30 seconds, and a second tracing was made. At intervals of 30, 60, and 90 minutes following administration of the salts, serial electrocardiograms were made. At all times during the test, the patient was under continual observation by the attending physician and was continually monitored by electrocardiography.

The functionally abnormal T-wave is defined as one that is flattened or inverted in leads reflecting the anterior lateral or posterior aspects of the left ventricle when all parameters of organic heart dis-

ABNORMAL T-WAVE / Kellum

ease have been excluded. Because of its protean clinical manifestations, arteriosclerotic disease is the most difficult to evaluate or exclude, as Wasserburger and Corliss observed.

The present reporting relates to 13 patients in the Ochsner series. While many more were studied, it is felt that the findings among the 13 are representative of those observed in all the patients. Electrocardiographic changes in two of the 13 patients, again representative of all, will be presented.

MINIMUM STUDY CRITERIA

It is reiterated that patients were accepted for study only where there was no concrete clinical or historical evidence of heart disease. Each, however, revealed evidence of abnormal T-waves, usually in the form of nonspecific lowering or inversion, at electrocardiography. No attempt was made to study those patients showing overt evidence of heart disease, either physically or historically.

Of the 13 patients reported, 11 reverted to normal on their respective electrocardiograms within 60 to 90 minutes after ingesting the potassium salts. Almost without exception, electrocardiograms made after 30 seconds of hyperventilation showed more pronounced T-wave abnormality, either flattening or inversion.

In electrocardiography, well-defined, upright T-waves are normally present in most leads. This is especially true of those leads representing activity of the anterior lateral or posterior left ventricle. It is also true in the four-lead electrocardiograph used during the infancy of the instrument, and it is true of the 12 or 13 lead instruments employed today.

The electrocardiographic pattern for neuro-circulatory asthenia was described by Wendkos and Logue in 1946 and by Graybiel and White in 1947. It consists of flattening or inversion of the T-waves in leads 2 and 3 and AVF in an apparently normal individual. This pattern occasionally suggests a diagnosis of heart disease which is either nonspecific or specific, such as active myocarditis. Subsequently, it was found by Wendkos and Logue that the sympatholytic drug ergota-

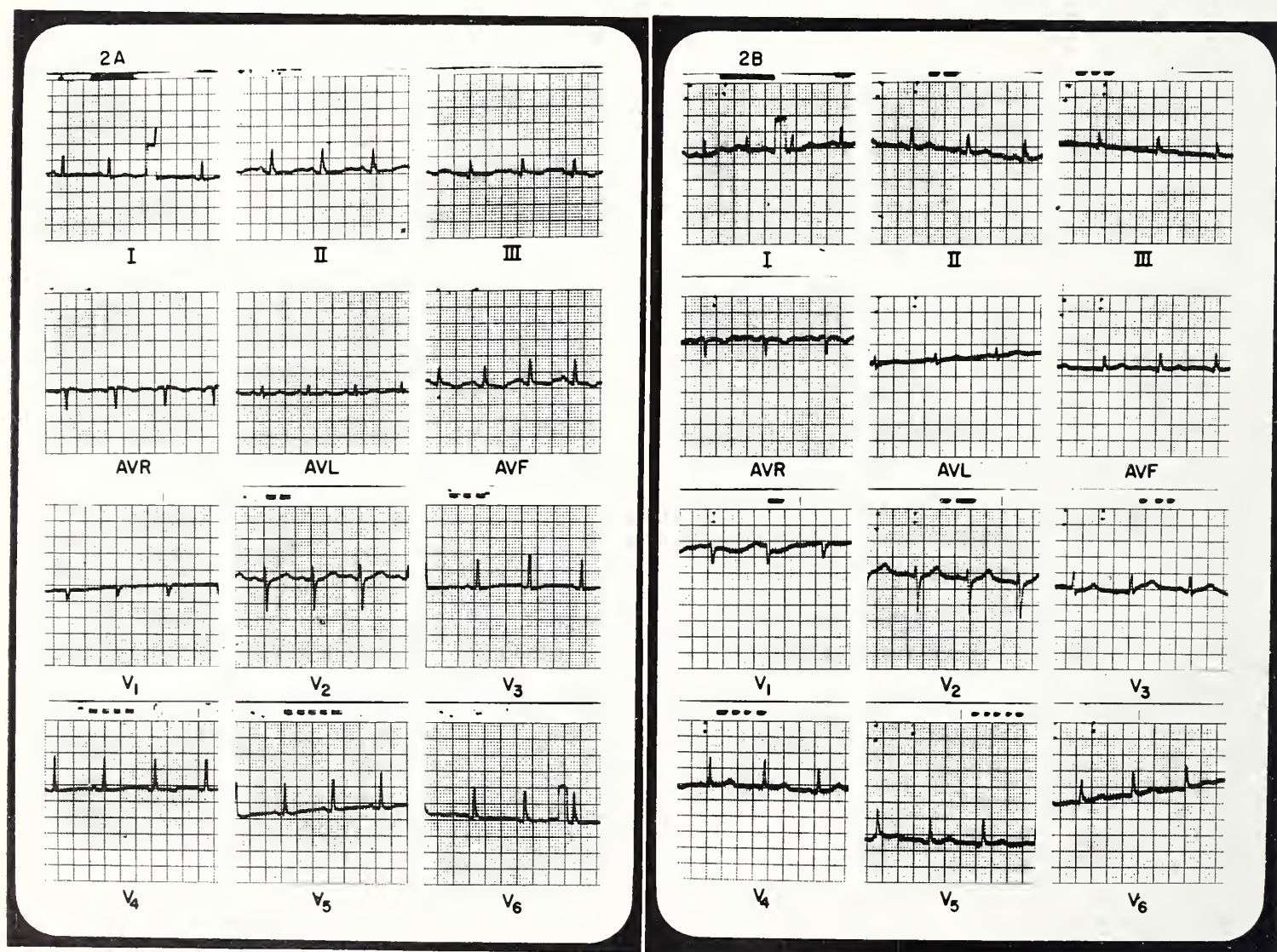


Figure 1

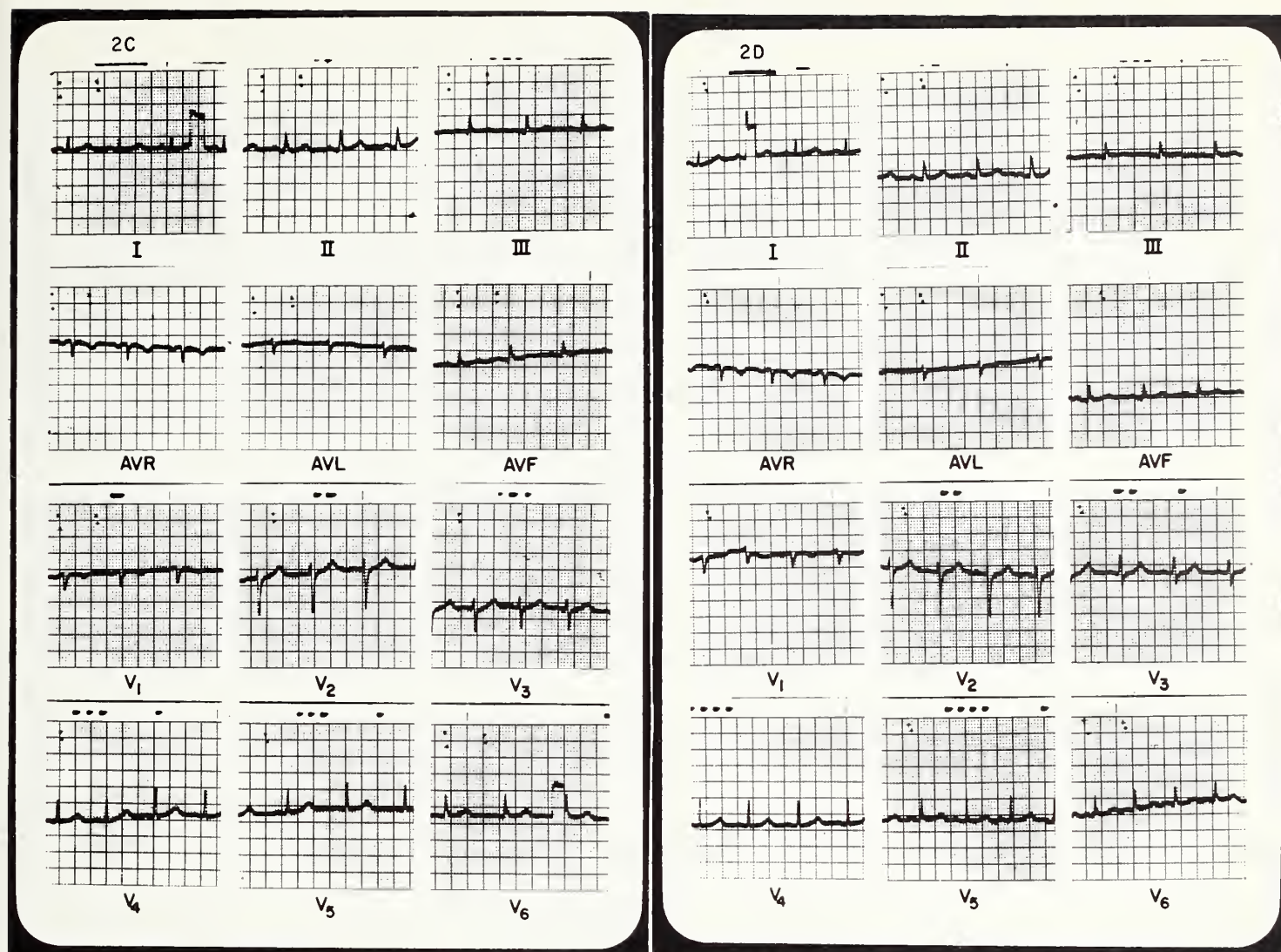


Figure 2

mine tartrate reverses the neurocirculatory asthenia pattern.

HYPERVENTILATION EFFECT

In 1943, Thompson reported that T-wave changes occurred after hyperventilation, and he suggested that this was due to respiratory alkylolysis, since this causes vasoconstriction. Occasionally, it was shown that these patients had decreased serum CO_2 with loss of base in the urine with a normal pH. It is most important to recognize that hyperventilation can and does cause electrocardiographic changes, notably T-wave abnormalities. This was borne out in the Ochsner studies. Such electrocardiographic changes usually revert to normal after recovery from hyperventilation.

In 1950, Schlachman and Rosenberg reported their observations of the effect of potassium on inverted T-waves in organic heart disease. They found that potassium salts restored organic T-wave inversions and could not be relied upon to differentiate T-wave changes. Moreover, it was observed that there was no correlation between the amount of potassium given and the serum po-

tassium levels. These investigators also stated that normalization is due to change in repolarization, because upright T-waves occur within 15 minutes and revert to the preloading state in two hours. The mechanism of the process is uncertain but may be attributable to a change in the membrane potential of heart cells.

In 1956, Wasserburger and Lorenz reported their observations of patients with nonspecific RS-T changes during hyperventilation. A third reverted to normal with reassurance, and the remaining two-thirds reverted to normal following administration of Pro-Banthine® and Banthine®. The drugs blocked the changes brought on by forced hyperventilation. All patients involved in this investigation had some emotional psychiatric disorder with vasomotor instability, anxiety, and hypochondriasis being prominent.

The Wasserburger-Corliss findings which prompted the present studies showed that functionally abnormal T-waves reverted to normal within 90 minutes after potassium salts were ingested. They reported that potassium salts blocked the changes of hyperventilation and that organically abnormal T-waves were generally unaltered

ABNORMAL T-WAVE / Kellum

by ingestion of potassium salts. Some negative T-waves due to infarction showed increased negativity. Occasionally, negative T-waves in fringe areas of myocardial infarction reverted toward or to normal with potassium salt ingestion. The investigators concluded that the procedure seemed to be of clinical usefulness in evaluating T-wave abnormalities of obscure etiology. They warned that it should not usurp clinical judgment, since the results are purely empirical and lack a sound pathophysiological basis.

STUDY FINDINGS

It has been noted that 11 of the 13 patients in the Ochsner studies showed reversion to normal after potassium loading. It was of interest that the two showing no reversion to normal were ultimately dismissed with a diagnosis of organic heart disease. One was healed myocarditis or pericarditis and the other, inactive myocarditis of obscure etiology but probably on the basis of collagen disease.

Examples adduced by the studies are illustrated in the series of figures presented.

In Figure 1, the electrocardiogram identified as 2A is that of a white female, age 35, who had a history of pericarditis in 1955. She complained of the case of fatigability, generalized malaise, and nonspecific chest pain. At physical examination, the heart findings were within normal limits. The resting electrocardiogram 2A is abnormal on the basis of low T-waves in leads I and V₃ through V₅. Potassium loading revealed reversion of the abnormal T-waves to normal in 60 and 90 minutes. Electrocardiograms 2B, 2C and 2D (Figure 2) represent 30, 60, and 90 minutes, respectively, after potassium loading.

Figures 3 and 4, presenting electrocardiograms 3A, 3B, 3C, and 3D, show the tracings obtained on a 50 year old white male, who, incidentally, was found to have this abnormal electrocardiogram, as recorded in 3A. This diagnosis was made on the basis of lowered T-waves in lead II, negative T-wave in AVF, and low T-waves in V₄ through V₆. Electrocardiograms 3B, 3C, and 3D respectively represent 30, 60, and 90 minutes after potassium loading. The tracings in 3B are

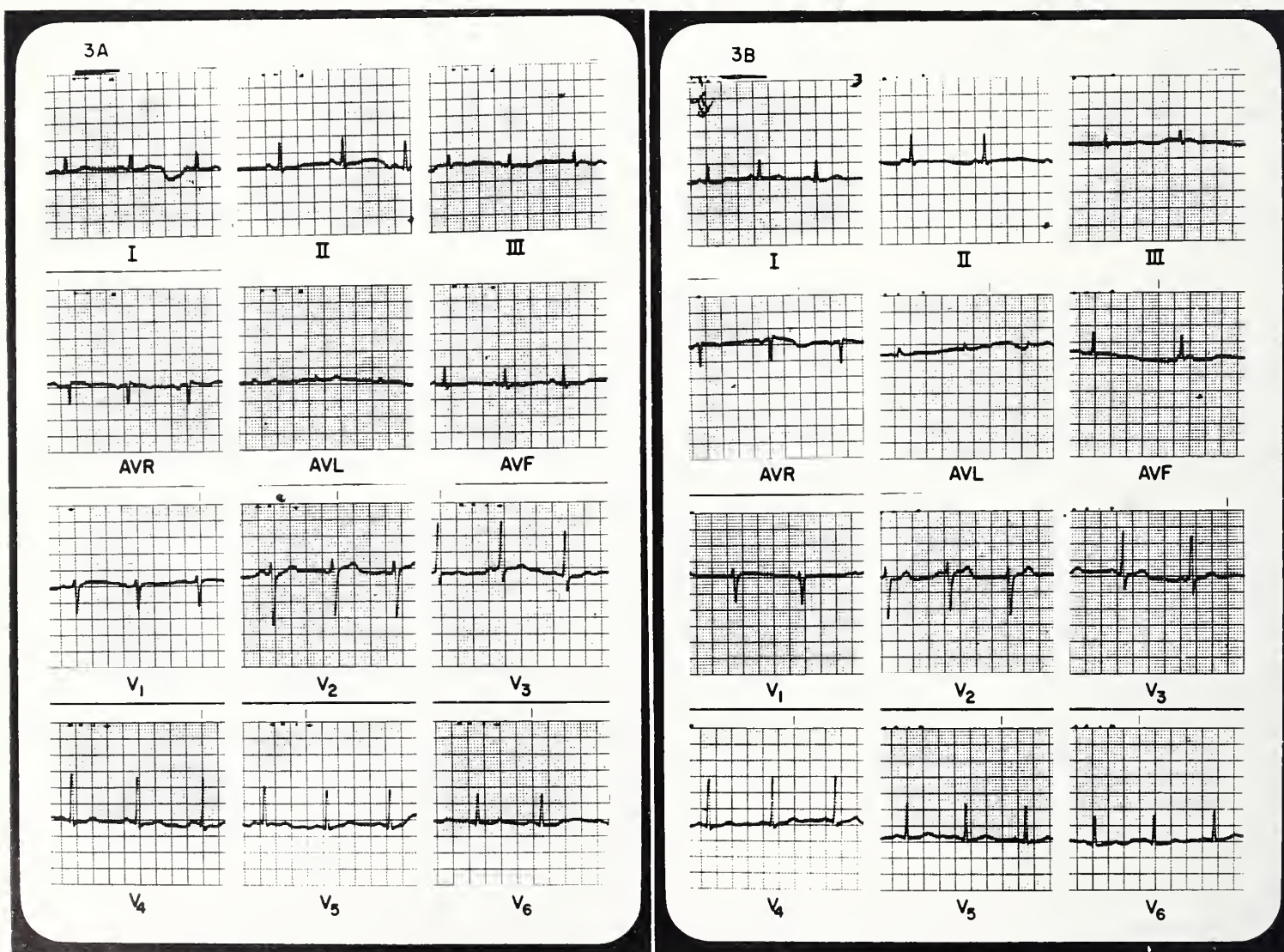


Figure 3

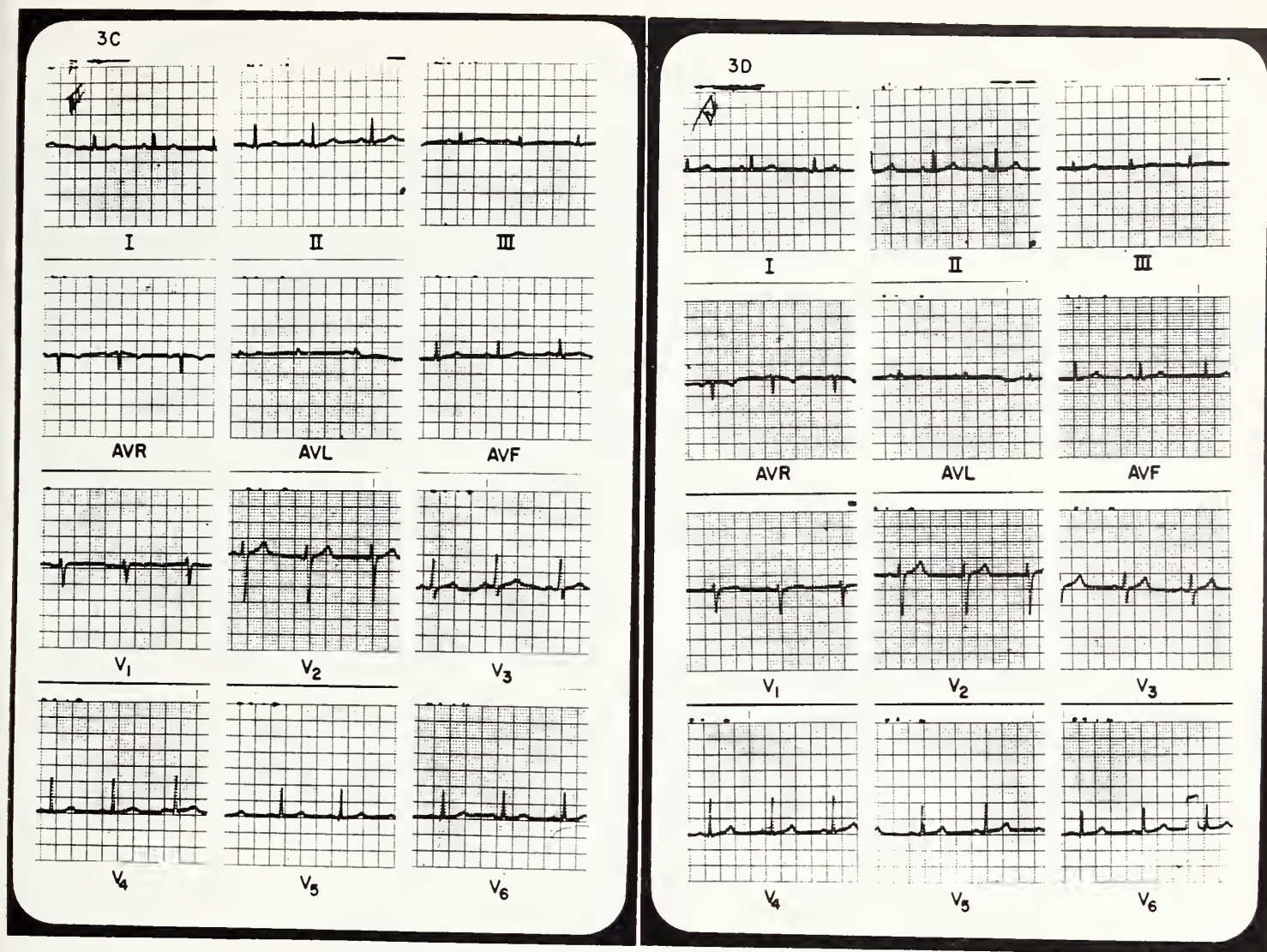


Figure 4

still abnormal, but in 3C and 3D, 60 and 90 minutes after potassium loading, the electrocardiogram has reverted to normal.

Although there are no electrocardiograms to show, both patients reverted to the preloading abnormal states at a later time.

It is felt that the potassium loading study can be of help in differentiating nonspecific T-wave abnormalities from those caused by organic heart disorders.

SUMMARY AND CONCLUSION

It is shown that hyperventilation brings about alteration of the T-wave of the electrocardiogram. It is also shown that the nonspecifically abnormal electrocardiogram, in the absence of heart disease, can be made to revert to normal in instances by ingestion of potassium salts. Figures presented illustrate electrocardiograms representative of results disclosed in the study.

Hyperventilation (forced) causes nonspecific T-wave abnormalities which revert to normal upon recovery from the experience.

The clinical opinion and judgment of the physi-

cian in these cases should be based upon thorough history and adequate physical examination rather than through reliance upon a study which as yet has no pathophysiologically proved basis. ★★★

500 North Gloster St. (38801)

REFERENCES

1. Wasserburger, R. H. and Corliss, R. S.: Value of Oral Potassium Salts in Differentiation of Functional and Organic T-wave Changes, *Am. J. Cardiology* X:673 (Nov.) 1962.
2. Wendkos, M. H. and Logue, R. B.: Unstable T-waves in Leads I and III in Persons With Neurocirculatory Asthenia, *Am. Heart J.* 31:711 (June) 1946.
3. Graybiel, A. and White, P. D.: *Electrocardiography in Practice*, ed. 2, Philadelphia, W. B. Saunders Co., 1947.
4. Thompson, W. B.: The Electrocardiogram in the Hyperventilation Syndrome, *Am. Heart J.* 40:81 (July) 1950.
5. Wasserburger, R. H. and Lorenz, T. H.: Effect of Hyperventilation and Pro-Banthine on Isolated RS-T Segment and T-wave Abnormalities, *Am. J. Heart J.* 51:666 (May) 1956.
6. Somellas, W. and LeVeen, H. H.: Effect of Alteration of Serum Potassium on Urethral Peristalsis, *J.A.M.A.* 88:76 (April 6) 1964.
7. Joseph, F., Cohn, W. E., and Greenberg, D. M.: Studies in Mineral Metabolism With the Aid of Artificial Radioactive Isotopes, II—Absorption and Excretion of Potassium, *J. Biol. Chem.* 128:673, 1939.

Radiologic Seminar LVIII: Peyronie's Disease

BERNARD T. HICKMAN, M.D.
Jackson, Mississippi

PEYRONIE'S DISEASE is a plastic acellular hyalinization which occurs in the sheath of the corpora cavernosa of the penis, usually on the dorsum (Figure 1). It can be confused with carcinoma due to its firmness. It is painful and causes distortion and deviation of the penis with erection. The fibrous tissue is quite similar to that seen in old keloids, and calcification may occasionally take place in the long standing induration.

Surgical treatment presents a problem in that, like keloids, recurrence is common. Although the plaques are not particularly radiosensitive, they respond similarly to keloids with some softening often reported and with cessation of progression of the infiltration. The average time for improvement following irradiation therapy is six months, but sometimes eighteen months may be required.

Medical therapy consists of long-term management with alpha-tocopherol (vitamin E). Injection of the plaques with corticosteroids has also been tried.

Radiation treatments consist of a total of 1000r given to the entire shaft of the penis in three treatments over a period of a week with the patient holding the penis as shown in Figure 2. The glans of the penis and the testicles are outside the radiation beam. The type of x-ray used (supervoltage, cobalt-60, or orthovoltage) does not matter, but a dosage of less than 1000r in two weeks has not proven effective. Radium molds have been tried, but the mechanics of construction of the mold and the physics required in dos-

age calculation make this form of therapy difficult for most radiologists and nothing is gained over ordinary x-ray therapy.

In the past six years, eight cases of Peyronie's disease have been treated with irradiation therapy at the University Medical Center. All have been white males in their 40's or 50's. They have obtained varying degrees of relief of pain and symptoms, but in nearly all cases the results were not immediate. A repeat course of irradiation therapy should not be offered for one year to allow time for evaluation of long-term radiation results.

Duggan¹ found that with x-ray doses of 1000r in 12 days to the penis that 83 per cent of the

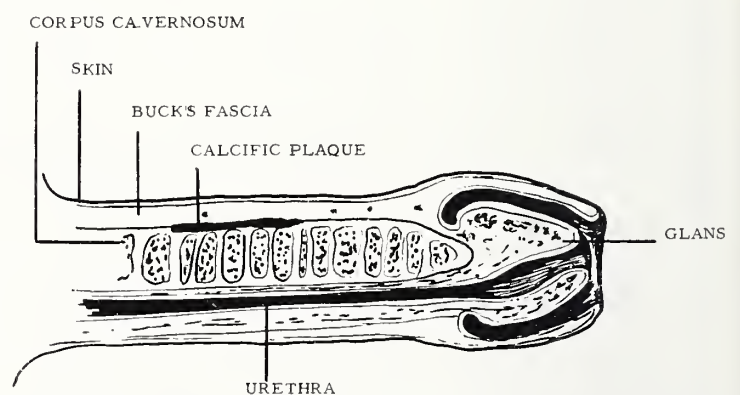


Figure 1. Illustration showing the typical location of the plastic acellular plaque which occasionally contains calcium.

patients being treated for the first time with irradiation showed improvement on long-term follow-up. The average time lapse before improvement was six months, with some cases requiring as much as 18 months. The chance for improvement

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University of Mississippi School of Medicine.

was not as great in those patients being treated the second time.

Van Andel² reporting on 18 cases of Peyronie's disease treated at the Radiological Institute in

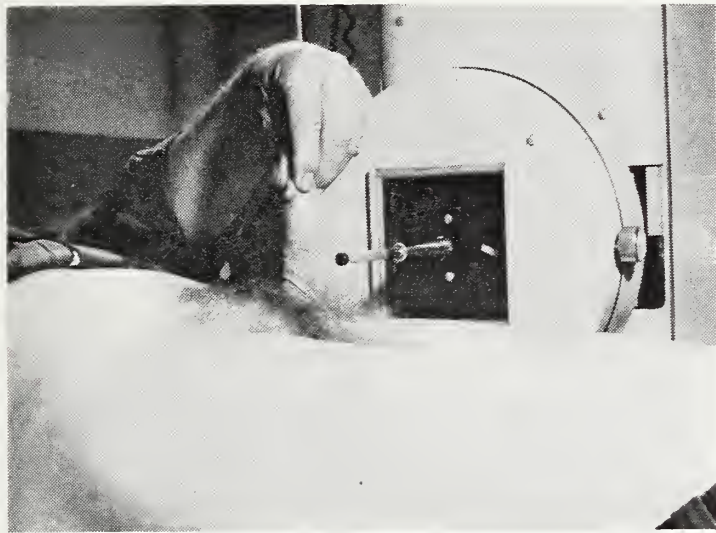


Figure 2. Photograph demonstrating the position of the patient and penis during therapy.

Groningen presented the same findings that we have noted.

1. The results of radiotherapy are good, possi-

bly better than those of other methods of treatment.

2. The intervals between courses of radiotherapy should be fairly long, as improvement will continue for a considerable time after treatment.

He also noted this finding that had not been apparent to us:

3. Patients with long standing cases do not respond less favorably to irradiation than those patients with a fairly recent onset of the malady.

★★★

2500 North State St. (39216)

REFERENCES

1. Duggan, H. E.: Treatment of Peyronie's Disease, J. Urol. 91:579-573, 1964.
2. Van Andel, J. G.: The Radiological Treatment of Plastic Induration of the Penis (Groningen), Ned T. Geneesk, 1964, 108/49 (p. 2350-2353).
3. Ackerman, L. V., and del Regato, J. A.: Cancer—Diagnosis, Treatment, and Prognosis, ed. 3, St. Louis, The C. V. Mosby Company, 1962, p. 895.
4. Moss, W. T.: Therapeutic Radiology—Rationale, Technique, Results, ed. 2, St. Louis, The C. V. Mosby Company, 1965, p. 495.
5. Holmes, G. W., and Schulz, M. D.: Therapeutic Radiology, Philadelphia, Lea & Febiger, 1950, p. 260.

RES IPSA LOQUITUR

"There's my bill for services rendered," said the lawyer. "Please pay me \$300 now and \$75 a month."

"Sounds like buying a car," observed the client.

"I am," retorted the attorney.

Clinicopathological Conference LXXXV

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

THIS 14 YEAR OLD MALE was admitted with the chief complaint of vomiting blood for the past 18 hours. The patient was well until two months prior to admission, when he developed fever and malaise. He was hospitalized elsewhere for several days and improved without specific treatment.

Six weeks prior to admission he had an episode of arthritis involving the left ankle and the right knee and was told that he had rheumatic fever.

Four weeks prior to admission he was begun on prednisolone 20 mg per day and aspirin 1.5 gm per day.

One day prior to admission he developed a sensation of something "stuck in his throat" and vomited. This was followed by hematemesis of approximately 1000 ml. He was transfused with two units of blood and referred to the University Medical Center for further evaluation and treatment.

Physical examination on admission revealed a well developed boy in no distress, with pallor. Blood pressure was 170/70 in both arms, pulse 110 and regular. There were ichthyotic changes over the abdomen and legs. Fundoscopy revealed blurred discs. The lungs were clear, except for relative dullness over the right base, posteriorly. The heart beat was hyperactive with point of maximum impulse in the sixth intercostal space. A high pitched systolic murmur grade IV/VI was heard in the fourth right intercostal space radiating down over the liver. Grade III/VI systolic murmur was heard at the left sternal border at the fourth interspace, which did not radiate. The abdomen was flat and no organs or masses were felt. There was slight tenderness in the left upper quadrant. Bowel sounds were active. Bruit was noted over the left side of the abdomen, at the level of the umbilicus. Rectal examination was normal, with stools hematest negative.

Laboratory data on admission was: Hemoglobin 8.3, hematocrit 24, white blood count 22,000 with 15,400 polymorphonuclears. Urine contained 10-20 WBC and 5-10 RBC per field, otherwise was normal. BUN was 29, electrolytes normal, creatinine 1.4, SGOT 70, alkaline phosphatase 10, serum albumin 3.0, globulin 2.8, VDRL non-reactive, C-reactive protein +++++. ASO titer was 500 Todd units, latex screen test negative. Febrile

In Clinicopathological Conference LXXXV, Dr. James D. Hardy discusses the case of a 14 year old male who was admitted after vomiting blood. Past history disclosed episodes of fever, malaise, and arthritis of the left ankle and right knee. Other discussers are Drs. Carl G. Evers, William M. McKell, Jr., and Robert D. Sloan.

agglutinins were positive only for typhoid H to dilution of 1:40. EKG showed non-specific ST-T abnormalities. Chest film was suggestive of cardiomegaly and showed density in the superior mediastinum and parenchymal stranding in the left midlung field.

The patient was treated with blood transfusions and gastric lavage. In spite of initial clearing of gastric aspirate, he vomited suddenly a massive amount of blood and became hypoxic. Blood pressure and pulse were not obtainable.

Resuscitative measures consisted of intubation, more rapid blood transfusion, aramine, intracardiac adrenaline and I.V. Ca Cl₂. He expired at 2:45 p.m. on the day of admission, four hours after being seen initially.

Dr. Hardy: "I trust Dr. Sloan will show us an aortogram in due course. It should clarify matters considerably.

"The patient was a 14 year old boy who had been vomiting blood intermittently for the past 18 hours. He had been well until about two months prior to admission when he developed fever and malaise, and was hospitalized elsewhere for several days without improving. When a patient vomits blood, one assumes a probable diagnosis of peptic ulceration, esophageal varices, or gastric neoplasm. Blood is rarely reflexed from lesions below the level of the duodenum such as small bowel neoplasms, Meckel's diverticulum, or colonic ulceration or tumor. Thus when the patient vomits blood one expects the site of bleeding to lie in the duodenum or above. In addition to the gastric lesions previously mentioned, we must consider the possibility of a tear in the mucosa at the gastroesophageal junction (Mallory-Weiss syndrome) due to vomiting, or complete rupture of the lower esophagus which usually occurs on the left side with severe pain and mediastinitis.

"Yet by and large, when a patient vomits blood I expect them to have peptic ulceration, either gastric or duodenal, or esophageal varices. But our patient today is only 14 years of age. Children do sometimes have duodenal ulceration with bleeding but not often. He is almost too young to have alcoholic cirrhosis which might have produced portal hypertension with esophageal varices. There is no history of hepatitis; although sub-clinical hepatitis occasionally progresses to cirrhosis. We are not told of an umbilical infection at birth which might have produced portal vein thrombosis.

BACTERIAL INFECTION

"We do know he has had fever and this very often reflects a pyogenic infection, or at least a vigorous inflammation of some type. Since we are going to have to consider a mycotic or infective aneurysm as one of the possibilities, we may suspect that perhaps the fever was due to the pyrogenic effects of bacteria. Six weeks prior to admission he had what was called arthritis and the protocol mentions rheumatic fever. Well, it could have been rheumatic fever but it also could have been some sort of pyogenic arthritis of another type. Four weeks prior to admission he was put on prednisolone and aspirin. Obviously his doctor did think he had rheumatic fever, and I usually pay careful attention to the tentative diagnosis of the family physician. By and large, the patient is usually known pretty well by his local physician, and he appreciates when he can safely recommend a hot water bottle and on the other hand, when the patient needs more substantial therapy. Thus,

this patient was believed to have a serious disease, probably rheumatic fever.

"On the day prior to admission he developed a sensation of something 'stuck in his throat' and vomited. Ordinarily if someone said something was stuck in his throat, one could suspect he had swallowed a fish bone or something of the sort, or that a bolus of meat had arrested above a stricture of spastic segment of the esophagus.

HEMORRHAGE

"A stricture or spasm might be secondary to peptic esophagitis, achalasia, or simple apprehension. How many members of the audience have ever had something stick in their throat that wouldn't go down? I see there are quite a few. Dr. Sloan, there is room for a mass survey here, and I will add one myself. Well, this patient thought something was stuck in his throat and vomited. I think if this were something bony or metallic we could see it on chest film or it could be visualized at esophagoscopy. In any case, he vomited 1000 ccs of blood rather rapidly, indicating a serious lesion in the alimentary tract, or one bleeding into it. Yet he was otherwise in no distress. To reemphasize, the sensation of 'something stuck in his throat' is not associated with pain; this was painless hemorrhage.

"The blood pressure was 170/70 in each arm. While he has an elevated systolic pressure, he has a normal diastolic pressure. This situation may present in hyperthyroidism, arteriosclerosis or aortic insufficiency. The first two seem unlikely. Could he have had Marfan's syndrome with aortic insufficiency? The murmurs described below do not suggest aortic insufficiency. There were ichthyotic changes over the abdomen and legs, and I wondered if there is some syndrome in which congenital ichthyosis is associated with a connective tissue defect and arterial disease.

"The fundoscopy revealed blurred optic discs. This could have been associated with diabetes mellitus, kidney disease, hypertension from other causes or increased intracranial pressure due to a mass lesion, such as tumor, hematoma, and brain abscess. Yet there is no mention of dizziness, fainting spells, or headaches and one wonders how experienced the ophthalmic examiner was. The lungs were clear.

"Dr. Sloan will review the films in a few moments. Apparently the patient had an enlarged heart, since the PMI was in the sixth intercostal space. A high pitched systolic murmur, grade IV/VI, was heard in the fourth right intercostal space radiating down to the liver, and a grade

III/VI systolic murmur was heard at the left sternal border. The abdomen was flat and no organs or masses were felt. There was slight tenderness in the left upper quadrant; its significance eludes me. Bowel sounds were active and a bruit was noted on the left side of the abdomen at the level of the umbilicus. Now, when one hears a bruit he may well expect some pathological distortion of a vascular structure, usually a constriction. Bruits may be produced by dissecting aneurysms that tend to encroach on the lumen or by atherosclerotic deposits that tend to narrow the lumen and cause a jet effect or a bruit may be caused by pressure from the outside upon the vessels. In any event, we have a definite finding here.

"Next, there is the interesting statement in the protocol to the effect that although the patient has been vomiting substantial amounts of blood the stools are hematest negative. This is surprising, unless he has an obstruction below the level of the stomach, or because the blood has not yet passed through the alimentary tract. Thus the hemorrhage is associated with clinical evidence of infection, with a white count of 22,000 and a shift to the left. He had nonspecific ST-T abnormalities even at the age of 14, and we have a density in the superior mediastinum with parenchymal stranding in the left midlung field. I wonder if Dr. Sloan would show the films at this time."

X-RAY FINDINGS

Dr. Sloan: "The x-ray coverage was limited to a single PA of the chest. I shall not mention diagnostic possibilities because I know what the pathologists found. There is an obvious mass in the left lung field, slightly superior to the left hilum, which appears to be contiguous with the mediastinum. There is some minor stranding of the adjacent left upper lobe. The heart is enlarged with a rather non-specific contour."

Dr. Hardy: "Well, I haven't seen this film previously. Incidentally, students, there is great value in personally viewing the films of your own patients. You can read reports all day long, but until you actually look at the film you may not get the feel of the case. This mass in the mediastinum looks like an aneurysm of some sort to me, just on the face of it."

"Now let me sum up. We have a boy 14 years of age, who has had fever, malaise and other evidence of infection for two months. We don't have an aortogram. This would have been very helpful.

When a patient bleeds like this boy did and absolutely exsanguinates all of a sudden, it is not merely venous bleeding; even a person with bleeding esophageal varices rarely exsanguinates this rapidly. I think it was arterial exsanguination and it wasn't from a small vessel, either. It was massive hemorrhage probably from the aorta, into the alimentary tract. I have never seen an aneurysm rupture into the esophagus. I have seen them rupture into the lung a number of times, the first symptom and frequently the last symptom of which was hemoptysis. One of my acquaintances was bronchoscoping a patient with a mediastinal lesion without having seen the chest x-ray himself, which he bitterly regretted later, for he was an experienced physician and would probably have been moved to caution. He took a biopsy of 'granulation tissue' at the carina, and the patient exsanguinated through the bronchoscope from an aortic arch aneurysm.

CARDIOVASCULAR INVOLVEMENT

"I believe this boy had an aneurysm of the aorta or at least some aortic lesion which perforated into the esophagus. He was too young to have a syphilitic aneurysm, since this lesion rarely appears before the age of 40. Furthermore, leptic aneurysms are becoming rather uncommon. Most current aneurysms you see are atherosclerotic in genesis, but they too are extremely rare at age 14. Traumatic aortic aneurysm occur at all ages, but there is no history of trauma in this case. However, the lesion in this case appears to be in distal portion of the arch or the first portion of the descending aorta. Deceleration traumatic aortic aneurysms usually develop just distal to the origin of the left subclavian artery where the ligamentum arteriosum fixes the aorta at that point."

"Aneurysms of the aorta may develop in young people who have Marfan's syndrome. I don't know whether the ichthyosis which he exhibited over the lower part of his body is a feature of the general constellation of features of this syndrome. I presume that if the aneurysm were lying against the esophagus, and if it got infected with penetrating inflammation, the aneurysm might rupture into the esophagus. I know of one case in which, in the days before the Heller procedure for achalasia, we resected the cardio-esophageal junction. He developed severe peptic esophagitis which finally perforated into the aorta with resulting exsanguination. I might add that in those days we did not routinely perform an emptying procedure such as pyloroplasty or gastroenterostomy when the cardio-esophageal sphincter was sacri-

ficed. Thus chronic infection against the aorta can result in hemorrhage.

"So to get the ball rolling, I am going to say the boy ruptured an aortic aneurysm of some sort into the esophagus. It must have been a mycotic aneurysm due to infection, or Marfan's syndrome or one due to trauma. An aortogram would have been very helpful in identifying the type of aortic lesion that was present. Furthermore, surgical intervention was probably indicated in this case, though there is no mention that we were consulted. The systolic hypertension with a diastolic pressure of 70 suggests aortic insufficiency. Perhaps Marfan's syndrome with a resulting aneurysm which has become infected and perforated into the esophagus with fatal hemorrhage should be my first diagnosis."

Physician: "May I comment that those murmurs were not described clearly enough for diagnostic purposes, if one believes them significant in this case. If you do think you have an aneurysm ruptured into the esophagus or stomach, would you expect this to seal itself off spontaneously and repeat at a later date?"

Dr. Hardy: "Yes, that is one of the characteristics histories of aneurysms that rupture and bleed. As a matter of fact the same is true of people who have a ruptured abdominal aneurysm. Many of the aneurysms we resect are not leaking when exposed at operation, but one can see that they have ruptured and bled in the past. We had a patient with a ruptured aneurysm which Dr. Hare concluded had bled several times in the past, as judged from the resected sac. Incidentally that patient had undergone laparotomy three times previously for an "acute abdomen" and suspected intestinal obstruction, each time with no obstruction being found. Patients who have an aorto-bronchial fistula may cough a cup of blood followed by a quiescent period. But eventually, sudden renewed hemorrhage may produce drowning or exsanguination."

HOUSE STAFF DIAGNOSIS

Dr. Evers: "The working clinical diagnosis of the house staff was acute rheumatic fever with tricuspid insufficiency and possible mitral insufficiency, and gastro-intestinal hemorrhage due to ulceration associated with steroid therapy.

"As Dr. Hardy surmised, the patient had an aneurysm of sorts, with hemorrhage due to rupture into the esophagus.

"The patient's basic disease is a congenital heart disease, with a coarctation of the aorta, a patent ductus, and a bicuspid aortic valve. The

coarctation was an abrupt type, with a constricting ring at the level of the ductus, distal to the left subclavian artery. Proximally, the aortic circumference was 3.5 cm, at the level of coarctation this narrowed to 1.1 cm, and immediately distal to the coarctation this widened to 4.8 cm, representing a mild post-stenotic dilatation. The ductus was patent, but fairly small, with a diameter of 0.3 cm.

"In the area immediately distal to the coarctation, there were numerous, friable, yellow vegetations on the aortic intimal surface. Cultures of both these vegetations and the blood yielded coagulase positive *Staphylococcus aureus*. There was a 1.5 cm perforation, on the posteromedial aspect of the aorta just distal to the coarctation. There was a fairly large mediastinal abscess in effect, with a tract leading from the aorta into the midesophagus at the level of the tracheal bifurcation. Microscopically, this fistula tract traverses field of suppuration, with considerable surrounding fibrosis, indicating it may have been present for some time.

STOMACH CONTENTS

"The stomach contained 1,200 to 1,300 cc of dark clotted blood, and the entire small bowel and ascending colon contained blood. There was no blood in the descending colon or rectum. There was no peptic ulceration.

"The mass seen in the left lung field on chest x-ray was due to a combination of the mediastinal abscess with the adjacent lung adherent with a localized empyema and severe acute inflammation in the adjacent lung tissue. This was also an organizing pneumonia, indicating it had been present for some time. The remainder of the lungs were unremarkable.

"The heart itself weighed 290 gm, with only slight hypertrophy of the wall of the left ventricle. There was no endocarditis, and the valves were normal except for the aortic valve. A bicuspid aortic valve is present in roughly 30 per cent of cases of coarctation and is associated with an aortic diastolic murmur. However, aortic insufficiency is usually not present.

"There were some associated findings which may explain some of the patient's signs and symptoms. The spleen was quite large; it weighed 750 gm, about three times normal size. It was quite soft, almost mushy, and contained several infarcts of different ages. There was a fibrinous perisplenitis, and 200 cc blond tinged peritoneal fluid. Perhaps these findings explain the left upper quadrant pain and the abdominal tenderness.

"There were multiple small infarcts in both kidneys, which varied in age. These probably were

responsible for the red blood cells in the urine. The infarcts were septic, containing numerous colonies of Staphylococci, identical to those present in the aortic vegetations.

"The ichthyosis probably is not related to the other congenital defects. It is congenital, and in this patient, involved the lower trunk and lower extremities. There is a syndrome in which the two are associated, known as chondro-ectodermal dysplasia (Ellis-van-Creveld syndrome), but the patient had none of the other manifestations, such as shortened bones of the extremities, dystrophic terminal phalanges and defective dentition."

Dr. Sloan: "Was a blood pressure recorded in the lower extremities, or was any statement made about femoral pulsations?"

Dr. Weissberg: "The blood pressure in the lower extremities was not recorded during the physical examination."

Dr. McKell: "Femoral pulses were present but were weak, and there were no pulses felt below. We attributed this to a combination of the thickened indurated skin of ichthyosis and to the fact that he had had a lot of blood loss and probably hypotension."

Dr. Sloan: "The second question I want to ask the pathologist. Do you think the steroids had anything to do with the patient's demise? Is it related to the infection or perhaps the rapid perforation of the aneurysm?"

Dr. Evers: "I believe the infection in the form of bacterial endarteritis was already present. Whether or not it hastened his demise is difficult to say. Certainly cortisone therapy is usually contraindicated in the presence of bacterial infection."

Dr. Hardy: "Was any notching of the ribs by intercostal collateral arteries present on the films?"

Dr. Sloan: "It is not present, even knowing the diagnosis and reviewing the film."

Physician: "A coarctation should be easily

diagnosed by a routine physical exam and more often than not in this age group you can make the diagnosis on a routine chest film. Even in retrospect there is no suggestion of notching which is the thing you have to see to really call it. I don't know why he didn't have notching. In addition to the increase in the size of the heart he has prominence of his ascending aorta. You can see a shadow coming up there but this is in retrospect, and is one of the secondary signs."

Dr. Evers: "In some series, people have commented on the absence of collateral circulation in the presence of an associated patent ductus."

Dr. McKell: "I was the admitting physician. In reviewing the literature I was only able to find five cases of coarctation of the aorta that had ruptured into the esophagus and died by exsanguination. There were many that had ruptured usually into the mediastinum or into the pleural cavity."

Dr. Evers: "When rupture occurs, it is usually in the ascending aorta rather than distal to the coarctation."

Dr. Hardy: "Why do you think his diastolic blood pressure was as low as it was? Unless he may have had some aortic insufficiency."

Dr. Evers: "I really don't know. Was the bicuspid valve an insufficient valve? Certainly the heart had very little hypertrophy."

ANATOMICAL DIAGNOSIS

- I. Coarctation of aorta with patent ductus and and bicuspid aortic valve.
 - A. Bacterial endarteritis due to Staph. aureus.
 1. Rupture of aorta with mediastinal abscess and perforation of esophagus with exsanguination.
 2. Multiple septic infarcts of spleen and kidneys.
 3. Septicemia due to Staph. aureus.
- II. Congenital ichthyosis. ★★★

2500 N. State St. (39216)

WEST TO EAST

The latest word on industrial expansion is the rumor that a plant is being constructed in Chicago where the front end of horses will be manufactured. These components will then be shipped to Washington for final assembly.

TRUSTEES, COUNCILS, AND COMMITTEES

■ BOARD OF TRUSTEES

JOHN B. HOWELL, JR., Canton, Chairman (1968)
LAMAR ARRINGTON, Meridian, Vice Chairman (1968)
C. D. TAYLOR, JR., Pass Christian, Secretary (1969)
LYNE S. GAMBLE, Greenville (1967)
JOSEPH B. ROGERS, Oxford (1967)
J. T. DAVIS, Corinth (1967)
MAL S. RIDDELL, JR., Winona (1968)
W. E. MOAK, Richton (1969)
G. SWINK HICKS, Natchez (1969)

■ COUNCIL ON BUDGET AND FINANCE

J. T. DAVIS, Corinth, Chairman (1968)
DANIEL L. HOLLIS, Biloxi (1967)
GEORGE D. PURVIS, Jackson (1969)

■ EDITORIAL COUNCIL

W. MONCURE DABNEY, Crystal Springs, Editor (1969)
GEORGE H. MARTIN, Vicksburg, Associate Editor (1968)
THOMAS W. WESSON, Tupelo, Associate Editor (1967)

■ COUNCIL ON MEDICAL EDUCATION

E. LEROY WILKINS, Clarksdale, Chairman (1967)
W. O. BARNETT, Jackson (1968)
DENNIS E. WARD, Corinth (1969)

■ COUNCIL ON CONSTITUTION AND BY-LAWS

E. LEROY WILKINS, Clarksdale, Chairman (1969)
JOHN B. HOWELL, JR., Canton (1967)
RAYMOND S. MARTIN, Jackson (1968)

■ COUNCIL ON LEGISLATION

W. E. LOTTERHOS, Jackson, Chairman (1967)
JOHN G. EGGER, Drew (1968)
JAMES O. GILMORE, Oxford (1968)
FRANK M. DAVIS, Corinth (1968)
PAUL B. BRUMBY, Lexington (1967)
LAMAR ARRINGTON, Meridian (1967)
A. T. TATUM, Petal (1969)
A. V. BEACHAM, Magnolia (1969)
ELDON L. BOLTON, Biloxi (1969)

■ JUDICIAL COUNCIL

E. LEROY WILKINS, Clarksdale, Chairman (1968)
R. L. WYATT, Holly Springs (1968)
THOMAS N. BRADDOCK, JR., West Point (1968)
PAUL B. BRUMBY, Lexington (1969)
WILLIAM B. WIENER, Jackson (1969)
OMAR SIMMONS, Newton (1969)
A. T. TATUM, Petal (1967)
G. SWINK HICKS, Natchez (1967)
W. J. WEATHERFORD, Pascagoula (1967)

■ COUNCIL ON MEDICAL SERVICE

GUY T. VISE, Meridian, Chairman (1968)
GEORGE F. ARCHER, Greenville (1969)
JAMES O. GILMORE, Oxford (1969)
JACK M. SENTER, Belmont (1969)
PAUL B. BRUMBY, Lexington (1968)
JOHN G. CADEN, JR., Jackson (1968)
T. E. ROSS, Hattiesburg (1967)
R. J. FIELD, JR., Centreville (1967)
WESLEY L. MCFARLAND, Bay St. Louis (1967)

■ COUNCIL ON SCIENTIFIC ASSEMBLY

JAMES L. ROYALS, Jackson, Chairman
SETH H. BARRON, Columbia, EENT
PAUL B. BRUMBY, Lexington, GP
WILLIAM E. WEEMS, Laurel, Medicine
CHESTER H. LAKE, Jackson, Ob-Gyn
J. LEE OWEN, Jackson, Pediatrics
SHELBY W. MITCHELL, Ellisville, Preventive Medicine
GEORGE E. GILLESPIE, Jackson, Surgery



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1967, Atlantic City, N. J.; Clinical Convention, Nov. 26-29, 1967, Houston, Texas. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

American Academy of General Practice, Sept. 18-21, 1967, Dallas, Texas. Mr. Mac F. Cahal, Executive Director, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

American College of Surgeons, Annual Congress, Oct. 2-6, 1967, Chicago, Ill. John P. North, Director, 55 E. Erie St., Chicago, Ill. 60611.

Southern Medical Association, Nov. 13-16, 1967, Miami Beach, Fla. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

American College of Physicians, La.-Miss. Regional Meeting, Feb. 24-25, 1967, New Orleans, La. G. Gordon McHardy, Chairman, 3636 St. Charles Ave., New Orleans, La. 70117.

STATE AND LOCAL

Mississippi State Medical Association, May 15-18, 1967, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday March and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September,

and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. A. Wayne Sullivan, 1204-21st Ave., Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box L, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.



The Challenge of People: Key to Care of the Mentally Ill

JOHN J. HEAD, M.D.

Whitfield, Mississippi

I

THE CRUCIAL QUANTITY in the health care equation is skilled professional personnel. Unfortunately, this imbalance is relatively static, because the deficit becomes more profound as the Congress and several states devise and fund new programs in the forward thrust toward comprehensive care for all. It is obvious that an inpouring of new money can result in new and expanded health care facilities construction. New equipment can be purchased, communications programs devised, supplies amassed, and a host of organizational tasks completed. But the test of reality hinges upon the presence of physicians and allied professional personnel competent to undertake the task of rendering the care.

Since the moment that the chains and shackles were first removed from the mentally ill, this has been the thesis of the problems encountered in rendering their care. The consequences were virtually inevitable: Throughout the 19th and well into the 20th centuries, the massive task, the small resources, and the stigmata of prejudice and ignorance combined and interplayed to establish a pattern of care which is poor testimony in behalf

of a society which can land a television station on the moon and drive away from the launching pad in a Cadillac.

Historically, the mentally ill and retarded have been isolated in big institutions. For the most part, these have been inadequately staffed and insufficiently funded. And the overall lack of concern and urgency toward mental illness relegated its care to political subdivisions. No physician need be reminded that a bleeding ulcer is respectable; schizophrenia is not.

II

Let there be neither misunderstanding nor misinterpretation of the effectiveness of the large state- and county-supported institutions for care of the mentally ill. While they—as is true of most general medical and surgical hospitals—may fall short of the ideal in specialized care, these large institutions continue to fulfill a vital role in medical care.

This is true of the three state-supported institutional facilities in the state, the Mississippi State Hospital at Whitfield, the East Mississippi Hospital at Meridian, and the Ellisville State School, established in 1855, 1890, and 1924, respectively. Their progressive development into high utilization, effective clinical centers with a combined

Chairman, Committee on Mental Health, Mississippi State Medical Association.

EDITORIALS / Continued

total of about 7,300 beds is a tribute to enlightened legislatures and the dedicated concern of many governors. Yet, their pressing and largely unmet need today is for skilled personnel, because in Mississippi as is universally the case, the challenge of people is the key to care of the mentally ill.

It cannot be said that this century-long problem is unique to psychiatrists and administrators in these large government institutions. For many years, the Mississippi State Medical Association has shared this view with serious concern. Since 1957, provisions have been made for a constitutional Committee on Mental Health. The findings of the committee, based on studies of needs with reference to skilled professional personnel, have been supported and approved by its parent body, the Council on Medical Service, and the House of Delegates. With the enactment of new and additional programs for extending and enlarging the nation's capacity to care for the mentally ill in the past four years, the problem has become more acute as the central focus of the challenge.

III

Exerting the most significant influence are three major enactments of the 88th Congress: The Maternal and Child Health and Mental Retardation Planning Amendments (Public Law 88-156), the Mental Retardation Facilities and Community Mental Health Centers Construction Act (Public Law 88-164), and the Health Professions Educational Assistance Act (Public Law 88-129). These were followed in less than two years with still more legislation in the Social Security Amendments of 1965 (Public Law 89-97) which is best known for the Medicare title.

The net effect of the legislation has been to emphasize development of facilities as a first need. While the Health Professions Educational Assistance Act will eventually have a salubrious effect in professional personnel training, it singles out no specific area of need and assigns no priorities to categories of needed personnel.

Under the state plan developed through the Hospital Survey and Construction Act of 1946, popularly known as the Hill-Burton Act, Mississippi ranks about midway among the 54 states and territories in the ratio of acceptable hospital beds to population. Nationally, the acceptable ratio is 3.46 beds per 1,000 population, and Mississippi, through its successful community hospital extension and construction program, has 3.26

beds per 1,000 or a scant two-tenths of a bed less than the national figure. The state is said to have met 77 per cent of its needs. Because of dramatic progress in the treatment of tuberculosis, the state is measured as having 100 per cent of its needs in this specialized area, and the same is true of diagnostic and treatment centers.

But we are said to have only one-sixth of our needs met in chronic illness beds, and 55 per cent of our needs satisfied in mental beds. It is from the latter that much of the popular hue and cry for facilities development comes.

IV

In 1963, before enactment of this federal legislation, there was a surge of popular, nonmedical interest in public and private programs for care of the mentally ill and retarded. High on the lists of urgent demands at that time was facilities development. The association's Committee on Mental Health contended that there should be a rational professional assessment of needs which are demonstrable.

Further, the committee concluded, there were four specific problem areas in which there is a challenge in this priority: First, personnel recruitment and training; second, adequate funds; third, research; and fourth, facilities development. Clearly, the hue and cry for bricks and mortar then, as it is today, as a first priority was hitching the cart ahead of the horse.

During 1963-1965, the Mississippi Mental Health Planning Council undertook a massive and comprehensive study of the full spectrum of a mental health program in the state. Its final report, "The Mississippi Plan—A Guide for Mental



Copyright © 1967 MSMA—Mississippi State Medical Association

You can't set her free. But you can help her feel less anxious.

You know this woman.

She's anxious, tense, irritable. She's felt this way for months.

Beset by the seemingly insurmountable problems of raising a young family, and confined to the home most of the time, her symptoms reflect a sense of inadequacy and isolation. Your reassurance and guidance may have helped some, but not enough.

SERAX (oxazepam) cannot change her environment, of course. But it can help relieve anxiety, tension, agitation and irritability, thus strengthening her ability to cope with day-to-day problems. Eventually—as she regains confidence and composure—your counsel may be all the support she needs.

Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax[®] (oxazepam)



Wyeth Laboratories
Philadelphia, Pa.

Health Action," was released in the fall of 1965. The state medical association has fully supported the plan.

V

The association's committee believes that implementation of the state plan will necessarily be a gradual process, requiring step-by-step evolution, and the committee said precisely this at a meeting on December 15, 1966. In this same connection, the following recommendations were made:

—The committee went on record as feeling that the first priority in meeting the overall needs in the areas of mental health and mental retardation is the training of personnel in all categories.

—The committee expressed the feeling that a mental health training center should be established in conjunction with the University Medical Center at the earliest possible time.

—The committee expressed opposition to the hasty establishment of service facilities before the necessary personnel are trained. It is inconceivable, the committee stated, that such facilities, if developed, could be properly staffed in the absence of an adequate training program.

In the earnest hope that every dollar expended, that every effort exerted, and that every aspiration sought may reach the highest fulfillment in the development of the best possible mental illness care program, let us be realistic, and let us be consistent. In the pursuit of these worthy goals, the time will come when bricks and mortar occupy the highest priority, but it will come only after more pressing priorities have been adequately met.

There is simply no greater need than that for skilled professional people; they will always be the key to care of the mentally ill. ★★★

Mississippi State Hospital (39193)

REFERENCES

1. Report of the Committee on Mental Health, Miss. St. Med. Assn., March 8, 1963, and Proceedings of the House of Delegates, 95th Annual Session, Miss. St. Med. Assn., May 13-16, 1963, J. Miss. St. Med. Assn. IV:360-363 (Aug.) 1963.
2. Jaquith, W. L.: The Treatment of Narcotism in Mississippi, J. Miss. St. Med. Assn. VI:15-17 (Jan.) 1963.
3. Official Minutes, Committee on Mental Health, Miss. St. Med. Assn., Dec. 15, 1966.
4. Kennedy, R. B.: American Hospitals: A Matter of Abundance, A Question of More, J. Miss. St. Med. Assn. VII:411-416 (Aug.) 1966.

Drug Costs: Dosing The Average American

The unique thing about the ubiquitous average is that there usually just isn't any such thing. But the United States Public Health Service has released findings in a study on what the average American spends for prescribed and nonprescribed medicines in a year. The period under investigation was July 1964 through June 1965.

Find an average American, and you have somebody who spent \$21 for medicines. Of this total, he paid out \$15.40 for prescription drugs and \$5.60 for his over-the-counter items. Since nobody is average, USPHS analyzed its findings by age bracket and discovered that the mean expenditure for youngsters under age 15 was only \$6.40, but for those over 65, the cost was \$41.40.

Females spend more for medicines than males with the distaff side paying out \$18.60 for prescriptions against \$12 for men.

An astonishing 879.8 million physicians' prescriptions were filled during the study period, breaking down to 4.7 scripts per person per year. The average Rx costs \$3.60, showing only a modest rise over the past decade. Finally, only 63 per cent of over-the-counter items are bought in pharmacies; the other 37 per cent are sold in supermarkets and department stores. In this era of high prices, drug costs are modest, and the purchase is a bargain.—R.B.K.

Social Security? It's Big Business

Social Security is big government in big business, as testified to by Robert M. Ball, the commissioner, in his year-end statement on the scope of his administration's activities. Gross benefits paid out or for eligible beneficiaries in 1966 amounted to \$21 billion. The sweeping amendments in Public Law 89-97 which also brought about Medicare and Title XIX increased Social Security spending by \$3 billion during the last six months of the year.

Commissioner Ball says that the 1967 payout, including Medicare, will reach \$25 billion. That puts Social Security second only to the Department of Defense in spending.

With Medicare dominating the news, few headlines disclosed that one out of nine Americans, an estimated 22 million men, women, and chil-

Estomul does what standard anticholinergics fail to do—it provides a continuous climate for ulcer healing, eliminating the peaks and valleys of ordinary therapy. It is a comprehensive formulation providing sustained antisecretory effect on gastric activity. A recent study¹ reported a 56% satisfactory response with a maintenance schedule of Estomul in patients refractory to all previous medication. In less difficult peptic ulcer patients, a second study² noted a 94% satisfactory response. Both studies confirmed this clinical improvement radiologically. And both reported unusually prolonged reduction of basal secretion. With a maintenance course of Estomul therapy you can provide this continuous climate for healing in your own peptic ulcer patients.

A continuous climate for ulcer healing

(not simply episodic reduction of secretion or motility)

Estomul[®]

Tablets

Each swallow tablet contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 25 mg.; magnesium oxide, 45 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 500 mg.

Good-Tasting Liquid

Each tablespoon (15 cc.) contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 50 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 918 mg.

Dosage: 1 or 2 tablets or 1 or 2 tablespoons 3 times daily.

Supplied: In bottles of 100 tablets or 12 fluid oz..

Side Effects: Doses in excess of 6 tablets or 6 tablespoons daily may produce dryness of mouth or blurring of vision. Other possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Contraindicated: In glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia and myasthenia gravis.

References: 1. McHardy, G. G., Judice, R. C., McHardy, R. J., and Cradic, H.: Southern Med. J. 59:459 (April) 1966. 2. Slinger, A.: Western Med. 6:205, 1965.



Riker Laboratories • Northridge, California 91324

EDITORIALS / Continued

dren, were receiving cash benefits as of December 31, 1966. That was an increase of 1.2 million over the end of 1965, too. The liberalizing amendments in PL 89-97 added a new 800,000 beneficiaries during the last six months of 1966. And every recipient of cash benefits received a 7 per cent or \$4 per month (whichever was greater) increase during the year.

Under the new Title XVIII, Medicare paid hospitals over \$1 billion in behalf of those over age 65, and about \$100 million was paid out for physicians' services. The latter lagged, of course, because of the \$50 deductible and 20 per cent co-insurance amounts. About 2.5 million senior citizens were admitted to hospitals under the program in six months, and about 3.5 million received physicians' services under Part 1-B. Nationally, the division between direct billing and the acceptance of assignments was about evenly divided.

During the final six months of 1966, about 30 per cent of all non-governmental hospital beds in acute, short-term facilities were occupied by those over age 65, but Commissioner Ball contends that the increase in occupancy has been boosted by only 5 per cent as a result of Medicare.

With the addition of nursing home benefits this year, the overall Title XVIII program could accelerate to as much as \$4 billion in 1967. It may be that Mr. Ball has been somewhat conservative in his prognostications.—R.B.K.

PERSONALS

ROBERT M. AKIN, DAVID L. CLIPPINGER, and JAMES R. STINGLEY have occupied new clinical facilities on S. Extension St. at Hazlehurst designated the Family Medical Clinic. The new building is designed in a traditional Southern motif and has six treatment rooms, laboratory, x-ray facilities, a cardiac room, storage space, reception room, and private offices for the physicians.

JAMES E. ALEXANDER of Biloxi has been elected president of both the Coast Carnival Association and the Mississippi Coast Kennel Club for 1967. He reigned over the 1966 Mardi Gras as King D'Iberville.

MAX A. CURRY of Biloxi has been elected president of the medical staff at Howard Memorial

Hospital, succeeding ROBERT F. CARTER, JR. Other 1967 officers of the staff are FRANK G. GRUICH, vice president; PAUL L. HORN, JR., secretary-treasurer; and WILLIAM F. EVERETT, chief of staff. Section chiefs include MAURICE A. T AQUINO, surgery; HARRY J. SCHMIDT, SR., medicine; WARREN C. PLAUCHE, obstetrics and gynecology; WALLACE S. SEKUL, pediatrics; and JAMES E. ALEXANDER, general practice.

JOHN D. MCEACHIN of Meridian has been elected to fellowship in the American Academy of Pediatrics. A native of Grenada, he received his pre-medical education at Millsaps College, his M.D. degree from the University of Tennessee College of Medicine, and his postgraduate training at Memphis.

STEVEN L. MOORE of Jackson was re-elected secretary of the Mississippi Public Health Association at the recent annual meeting. MARIAN W. GODBEY of Aberdeen was named chairman of the association's Section on Administration.

W. K. PURKS of Vicksburg has been elected to the board of directors of the Vicksburg Chamber of Commerce. He has held a number of key offices in the state medical association, the Mis-



Copyright 1967, Mississippi State Medical Association

"First of all, let's pretend that the Reader's Digest has never published any articles on medicine and then take it from there."

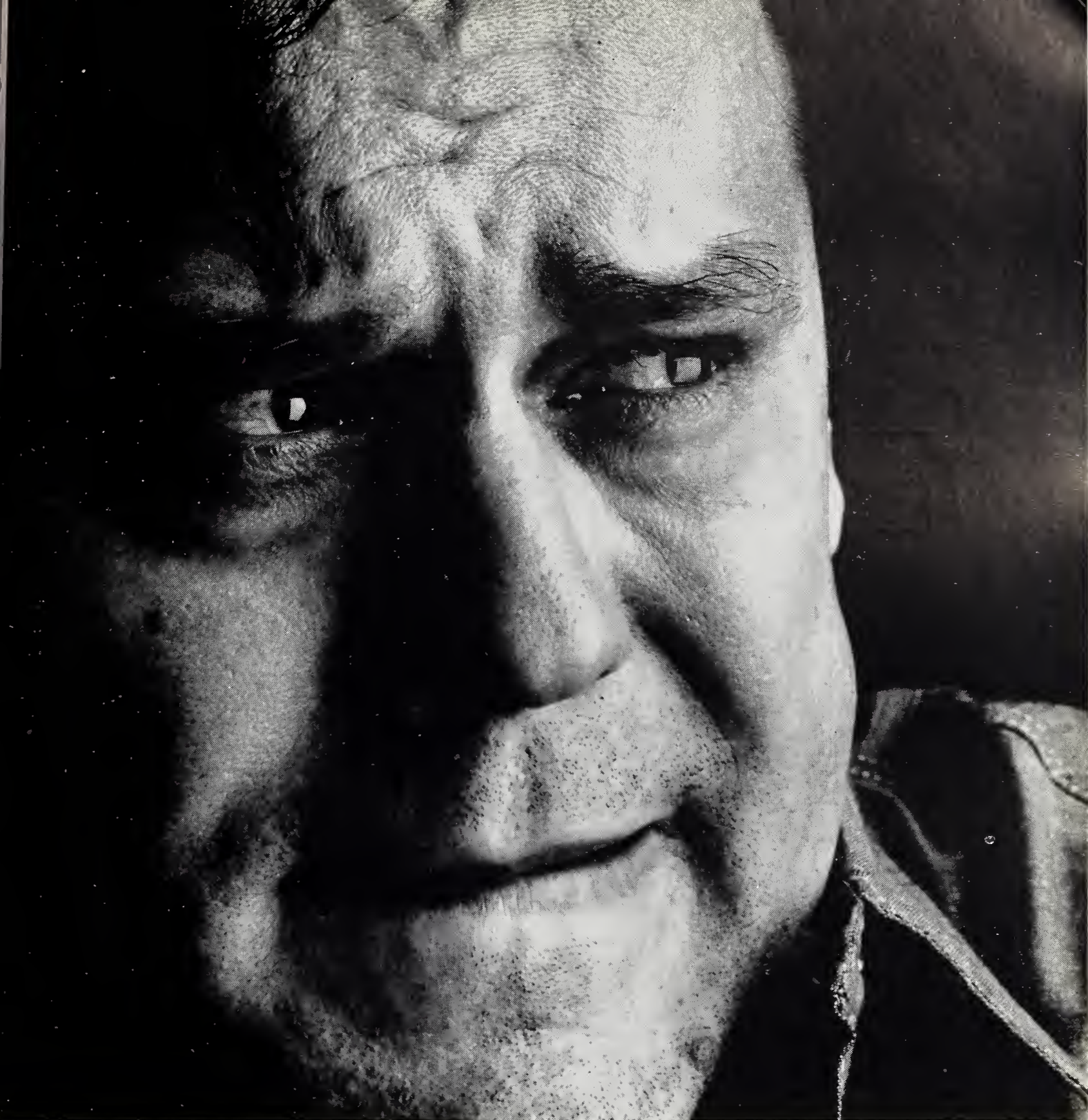


Photo professionally posed

Mike expects a penicillin injection. He's about to be pleasantly surprised.

His physician is going to prescribe an oral penicillin — **PEN • VEE® K** (potassium phenoxymethyl penicillin). It's usually so rapidly and completely absorbed that therapeutic serum levels are produced in 15 to 30 minutes. Higher serum levels generally last longer than with oral penicillin G.

Indications: Infections due to pathogens susceptible to oral penicillin G. Prophylaxis of rheumatic fever in patients with previous history of the disease.

Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin-allergy may occur. Measures for treating anaphylaxis should be readily available: epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; anti-

histamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β -hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

Composition: Tablets—125 mg. (200,000 units) and 250 mg., (400,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN • VEE® K**
(potassium phenoxymethyl penicillin)



PERSONALS / Continued

Mississippi Heart Association, and has served as governor of the American College of Physicians.

RALPH SNEED of Jackson has announced the association of HOWARD B. CHEEK and the formation of the Jackson Ear, Nose, and Throat Clinic where their practice is limited to otolaryngology.

B. G. SPELL of Jackson has announced the removal of his offices to the Medical Towers at 440 E. Woodrow Wilson Drive. He limits his practice to orthopaedic surgery.



NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BLACKBURN, CLAUDE JACK, Picayune. Born Belmont, Miss., Dec. 18, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned University of Mississippi School of Medicine, Jackson, one year; ob-gyn residency, University of Mississippi School of Medicine, Jackson, three years; elected Jan. 1, 1967, by Pearl River County Medical Society.

CHEEK, HOWARD B., Jackson. Born Memphis, Tenn., Nov. 5, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1958; interned Charity Hospital of Louisiana, New Orleans, one year; general surgery residency, Kennedy V.A. Hospital, Memphis, Tenn., one year; otolaryngology residency, University of Tennessee College of Medicine, Memphis, three years; Captain, U. S. Air Force, four years; elected Nov. 1, 1966, by Central Medical Society.

ESTEES, JOHN MURRAY, Florence. Born Hattiesburg, Miss., Sept. 10, 1937; M.D., University of Mississippi School of Medicine, Jackson, 1963; interned Mississippi Baptist Hospital, Jackson, one year; elected Sept. 6, 1966, by Central Medical Society.

FLEMING, RICHARD CHARLES, JR., Meridian. Born Meridian, Miss., Sept. 28, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned Memorial Hospital of Chatham County, Savannah, Ga., one year; internal medicine residency, University of Mississippi School of Medicine, Jackson, three years; Captain, U. S. Army;

elected Dec. 8, 1966, by East Mississippi Medical Society.

GIROUARD, DARRELL PHILIP, Pascagoula. Born Broussard, La., Oct. 16, 1932; M.D., Louisiana State University School of Medicine, New Orleans, 1959; interned Charity Hospital of Louisiana, New Orleans, one year; ob-gyn residency, Charity Hospital of Louisiana, New Orleans, three years; Captain, U. S. Air Force, two years; elected May 4, 1966, by Coast Counties Medical Society.

LEE, ALFRED EUGENE, University. Born Holmesville, Miss., Dec. 18, 1936; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned Fitzsimons General Hospital, Denver, Colo., one year; Captain, U. S. Army, three years; elected Oct. 8, 1966, by North Mississippi Medical Society.

LOCKEY, MYRON WILLIS, Jackson. Born Morehead City, N. C., Oct. 9, 1931; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned University of Mississippi School of Medicine, Jackson, one year; otolaryngology residency, V.A. Hospital, Dallas, Tex., four years; elected Nov. 1, 1966, by Central Medicine Society.

McKEE, WILBUR EILERS, Leakesville. Born Toledo, Ohio, Nov. 23, 1900; M.D., Ohio State University College of Medicine, Columbus, 1930; interned Grant Hospital, Columbus, Ohio, one year; member, American Academy of General Practice; elected June 9, 1966, by South Mississippi Medical Society.

TUCKER, FRANK HOWARD, JR., Meridian. Born Canton, Miss., Feb. 15, 1936; M.D., University of Mississippi School of Medicine, Jackson, 1961; interned University of Mississippi School of Medicine, Jackson, one year; general surgery residency, University of Mississippi School of Medicine, Jackson, four years; elected Oct. 3, 1966, by East Mississippi Medical Society.

WHITE, ELBERT ASA, III, Corinth. Born Corinth, Miss., July 17, 1935; M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1960; interned Vanderbilt University School of Medicine, Nashville, Tenn., one year; surgery residency, Vanderbilt University School of Medicine, Nashville, Tenn.; pediatric residency, Vanderbilt University Hospital, Nashville, Tenn.; Fellow of the American Academy of Pediatrics and a diplomate of the American Board of Pediatrics; Captain, U. S. Air Force; member, Aerospace Medical Association; elected Sept. 16, 1966, by Northeast Mississippi Medical Society.



POSTGRADUATE CALENDAR

POSTGRADUATE SEMINAR IN NEUROLOGY

University Medical Center, Jackson
February 23, 1967, beginning at 9:00 a.m.

Participants

Guests

William S. Fields, M.D., Professor of Neurology,
Baylor University College of Medicine, Hous-
ton, Texas

Robert A. Utterback, M.D., Professor of Neurol-
ogy, Department of Medicine, The University
of Tennessee College of Medicine, Memphis,
Tennessee

University Medical Center

Orlando J. Andy, M.D., Professor of Neurosur-
gery and Chairman of the Department

William E. Bowlus, M.D., Clinical Instructor in
Medicine (Neurology)

Robert D. Currier, M.D., Associate Professor of
Medicine (Neurology)

Armin F. Haerer, M.D., Assistant Professor of
Medicine (Neurology)

Richard W. Naef, M.D., Clinical Assistant Pro-
fessor of Medicine (Neurology)

James F. Suess, M.D., Associate Professor of Psy-
chiatry

Forrest T. Tutor, M.D., Associate Professor of
Neurosurgery

HEADACHES

THE NEUROLOGIST AND HEADACHES
Dr. Utterback

THE PSYCHIATRIST AND HEADACHES
Dr. Suess

THE NEUROSURGEON AND HEADACHES
Dr. Tutor

PANEL DISCUSSION OF TREATMENT OF
HEADACHES

Doctors Utterback, Tutor, Suess, and Ha-
erer

Moderated by Dr. Currier

WEAKNESS

NEURITIS AND AMYOTROPHIC LATERAL
SCLEROSIS

Dr. Haerer

MUSCLE DISEASES AND MYASTHENIA GRAVIS

Dr. Naef

STROKES

CLASSIFICATION AND DIAGNOSIS OF STROKES

Dr. Currier

MEDICAL TREATMENT OF STROKES

Dr. Bowlus

SURGICAL TREATMENT OF STROKES

Dr. Andy

REHABILITATION OF STROKES

Dr. Fields

PANEL DISCUSSION ON STROKES

Doctors Fields, Andy, Bowlus and Currier

Moderated by Dr. Utterback

CIRCUIT COURSES

COMBINATION CIRCUIT

Natchez: Feb. 21 and April 18

Columbus: Feb. 28 and April 28

EAST CENTRAL CIRCUIT

Laurel: To be announced

Meridian: March 7, April 4, and May 9

FUTURE CALENDAR

February 2

UMC DAY

February 3

DIAGNOSIS AND MANAGEMENT OF CHRONIC
RENAL DISEASE

February 23

CLINICAL NEUROLOGY II

March 9

ADVANCES IN PEDIATRICS

March 29-31

CARDIOVASCULAR SEMINAR

April 13

CONTROL OF DIABETES AND HYPERTENSION



now NovestrolTM (ethinyl estradiol U.S.P.)

estrogen replacement therapy

for the menopausal syndrome and female hypogonadism. Novestrol, a pure synthetic estrogen derivative, is related to estradiol which is the primary hormone of the ovarian follicle. It is effective orally and has all the actions of naturally occurring estrogen.

Ethinyl estradiol is the most active estrogen known. In addition to its high potency, Novestrol offers patients the advantages of minimal side effects, low cost, and convenience. Usually only a single daily dose is necessary.

Description: Each green, sugar-coated tablet contains 0.02 mg. of ethinyl estradiol U.S.P., a pure synthetic estrogen derivative, the most active estrogen known.

Indications: Menopausal syndrome and female hypogonadism.

Contraindications: Patients with tumors which estrogen might stimulate.

Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.

WILLIAM H. RORER, INC. Fort Washington, Pa.



Easter Seal Society Offers Scholarships

Scholarships for completion of training in physical and occupational therapy are available from the National Society for Crippled Children and Adults, it was announced. These scholarships are made possible through a grant from Kappa Delta Phi sorority.


Under this program, scholarships are awarded to seniors in a certificate course in physical or occupational therapy or to those completing their clinical affiliations. The basis of selection is academic excellence, financial need, and ability to utilize training.


The deadline for applications is May 1. For further information, those interested should write the Scholarship Coordinator, National Society for Crippled Children and Adults, 2023 W. Ogden Avenue, Chicago, Illinois 60612.



BARNES, THOMAS JAMES, Laurel. M.D., Meharry Medical College, Nashville, Tenn., 1923; interned Jane Terrell Hospital, Memphis, Tenn.; died Oct. 7, 1966, aged 71.

DARRINGTON, GILRUTH, Yazoo City. M.D., Tulane University School of Medicine, New Orleans, La., 1924; interned Charity Hospital of Louisiana, New Orleans, one year; member, International College of Surgeons and Southeastern Surgical Congress; died Oct. 10, 1966, aged 66.

 PETRO, CAMAL PETER, Jackson. M.D., University of Tennessee College of Medicine, Memphis, 1951; interned Charity Hospital of Louisiana, New Orleans, one year; radiology residency, University of Mississippi School of Medicine, Jackson, three years; died Oct. 25, 1966, aged 44.

 SIMMONS, SCHUBERT BRYAN, Newton. M.D., University of Tennessee College of Medicine, Memphis, 1945; interned Baptist Memorial Hospital, Memphis, Tenn., one year; member, American Association of Railway Surgeons; died Dec. 26, 1966, aged 47.

State Morbidity Reported Through December 23

The Mississippi State Board of Health reports the following occurrence of morbidity for 1966 through the 51st week of the year, ending Dec. 23. Case totals are shown opposite the disease condition.

Tuberculosis, pul.	838
Tuberculosis, O.F.	52
Dysentery, bac.	90
Dysentery, amebic	9
Salmonella, inf.	51
Brucellosis	14
Diphtheria	8
Meningitis, men.	24
Meningitis, O.F.	98
Mononucleosis, inf.	31
Myelitis	6
Encephalitis, inf.	17
Tetanus	8
Hepatitis, inf.	318
Meningococemia	5
Diarrhea of the newborn	4
Helminthic infections	
Hookworm	820
Ascariasis	421
Strongyloides	86
Taeniasis	19
Streptococcus infections	
Strep throat	3,802
Scarlet fever	53
Malaria, vivox	4
Mumps	469
Measles	1,345
Influenza	840
Chickenpox	243
Toxoplasmosis	2
Tularemia	4
Coccidiomycosis	2
Histoplasmosis	7
Polyneuritis	1
Rheumatic fever	4
Typhoid	7
Septicemia of the newborn	5
Syphilis	
Early	630
Late	132
Gonorrhea	4,682
Rabies in animals	
Bats	22



Book Reviews

U. S. Army in World War II: Medical Service in the Mediterranean and Minor Theaters. By Charles M. Wilter under the direction of Lt. Gen. Leonard D. Heaton, Surgeon General, U. S. Army. 664 pages. Washington: U. S. Government Printing Office, 1966. \$5.00.

After reading this book, I felt very much like Bill Mauldin's cartoon that appeared in the *Stars and Stripes* showing GI Joe and Willie looking back over the Anzio Beach after the Germans had been pushed back. These characters sat up in the high mountains overlooking the flat beach and said, "and we were down there."

This book gave me the feeling, as one who participated in the Italian Campaign as a battalion and regimental surgeon, "and I was down there."

This excellent book is a natural sequence to the one that was published in a series in 1956 entitled, *The Medical Department: Hospitalization and Evacuation, Zone of Interior*. The author of this work has addressed himself primarily to the interest and needs of the military student and reader. All doctors should find this interesting reading, but especially those who served in the armed forces in any theater.

This book deals with the overseas administrative history of the United States Army Medical Department in World War II as related to the Mediterranean and Minor Theaters. The prologue is beautifully written and very descriptive of the actual conditions as they existed. The author then divides the book into the various defense areas, and in each area he gives the military situation, the health problems, medical supplies, hospitalization, evacuation and common diseases. The book is easy to pick up and read chapters at a time, as each has a meaningful significance.

For all of you guys who were "over there," I can highly recommend this beautiful edition for your library, either at your office or your home, for it truly gives you the big picture and gives credit where credit is due, right down to the aid man.

WILLIAM E. LOTTERHOS, M.D.

Arteriography: Principles and Techniques (Emphasizing Its Application in Community Hospital Practice). By Joseph L. Curry, M.D., and Willard J. Howland, M.D., Department of Radiology, Ohio Valley General Hospital, Wheeling, W. Va. 328 pages with 223 figures and 13 tables. Cloth. Philadelphia: W. B. Saunders Company, 1966. \$14.00.

The book is a primer of arteriography which will serve as a good introduction to this complex field for the many medical disciplines utilizing angiographic procedures.

Sensibly delimited are the factors necessary to carry out a successful angiographic program in a community hospital. These include diagnostic x-ray equipment of high kilovoltage and milliamperage rating, image amplification, rapid cassette changing, pressure contrast injection system, rapid film processing, and cardiac monitoring equipment with defibrillator. Personnel requirements include qualified radiographic technicians, trained radiologic staff and sufficient medical and surgical specialists particularly neurological and vascular surgeons to be readily at hand and participate directly in the examinations. All of this medical staffing and equipment need would imply that a sizable patient load is necessary and that the book's subtitle should read *large community hospital* to be more accurate.

The best feature of the book is the description of techniques of specific arteriographic procedures particularly catheter studies and a good discussion of catheter characteristics and selection is given. A noteworthy section on renal arteriography with good illustrations is present.

In summary this should represent a good first book in arteriography particularly for residents in many interested specialties. It should also find a useful place with the experienced arteriographer as a procedure handbook for the vascular team.

DAN T. KEEL, JR., M.D.

Symposium on Surgery of the Ocular Adnexa. By the New Orleans Academy of Ophthalmology. 245 pages. St. Louis: C. V. Mosby Company, 1966. \$16.00.

This well-written and well-illustrated book is the published form of the symposium by the same

LITERATURE / Continued

name held by The New Orleans Academy of Ophthalmology in February, 1965. The book is primarily of interest to ophthalmologists. There are 18 chapters by several authors, each a participant in the symposium. Each author is an expert in his field of surgery and particular interest.

There is much good basic and clinical information about the eyelids in the early chapters. The surgical repair of congenital defects, entropion, ectropion, and ptosis is well covered. Contributions by Dr. Sidney A. Fox are particularly noteworthy.

Surgery and repair of the nasolacrimal drainage system are covered in detail by Dr. Everett R. Veirs. His chapters are an outstanding part of the book. As always, his words are detailed and interesting. Additional chapters cover orbital tumors, exenteration of the orbit, and other ophthalmic plastic procedures.

For those who did not attend the symposium in person, this book makes interesting reading. For those who did, it is a compact recording of the proceedings. I recommend this book to all ophthalmic surgeons interested in surgery of the ocular adnexa. It is a valuable asset to our libraries.

HENRY P. MILLS, JR., M.D.

DNA-Cancer Studies Funded by USPHS

Investigation of possible causal relationship between DNA viruses and human cancer will be carried out under three Public Health Service contracts. These projects, totaling approximately \$357,000, are part of the National Cancer Institute's DNA Solid Tumor Virus Program.

A contract with the University of Texas M. D. Anderson Hospital and Tumor Institute, Houston, will collect blood serum from cancer patients which will be studied for the presence of antibodies to DNA (deoxyribonucleic acid) viruses. A contract with Lilly Research Laboratories, Indianapolis, Indiana will provide large quantities of radioactively labeled DNA viruses for use in studies of how the DNA of viruses affect the DNA in malignant human cells. A broad spectrum of studies to elucidate the role of viruses in human cancer will be extended by a contract with Merck Institute for Therapeutic Research, West Point, Pennsylvania.

These DNA virus studies complement research on the RNA (ribonucleic acid) type of viruses

that induce leukemia and related diseases in experimental animals. While RNA viruses can be recovered from the tissues of diseased animals, DNA viruses disappear from the tumor cell and are therefore more difficult to implicate as a cancer cause.

An association between DNA viruses and cancer in animals can be shown by the presence of a distinctive antigen that appears in the tumor cell following virus infection and remains after the virus itself has disappeared. Known as a "T" or tumor antigen, it can be detected by its reaction with specific antibodies formed in the host's blood serum.

Sulfa Combination May Help in Malaria

The problems posed by drug-resistant strains of falciparum malaria, which have developed in Southeast Asia, may be eased, but not solved, through treatment with a sulfonamide-pyrimethamine combination.

Quinine remains the best drug available for patients who do not respond to synthetic antimalarials such as chloroquine. But if quinine fails to cure the infection, cannot be used, or is unavailable, then the sulfonamide-pyrimethamine combination should be considered, according to scientists of the National Institute of Allergy and Infectious Diseases, National Institutes of Health.

These conclusions are drawn from a study conducted at the U. S. Penitentiary in Atlanta, Ga., by malaria experts of the NIAID Laboratory of Parasite Chemotherapy. The results are reported in the current issue of the *American Journal of Tropical Medicine and Hygiene* by Drs. William Chin, Peter G. Contacos, G. Robert Coatney, and Herschell K. King.

Because of the toxic effects of quinine and the growing possibility of a shortage of the drug, the scientists evaluated three sulfonamides, both alone and in combination with pyrimethamine. The drugs were given to 40 volunteers who had been infected with one of four Southeast Asian strains of *Plasmodium falciparum*, the parasite which causes falciparum malaria. The sulfonamides tested were sulfadiazine, sulfamethoxypyridazine, and sulphorthomidine.

Three of the strains (Malayan III and IV and Thailand II) were known to be resistant to the synthetic antimalarials, chloroquine, chlorguanide, pyrimethamine, and mepacrine. The fourth (South Vietnam I) responded to pyrimethamine alone but was resistant to normal doses of both the other synthetics and quinine.



Dr. Thompson Keynotes Judges' Convention on Battered Child Law

The president of the Mississippi State Medical Association appeared as keynote speaker before the Eighth Annual Meeting of the Chancery and County Judges of Mississippi at Biloxi where implementation of the state's new battered child law was the principal subject. The meeting was also attended by representatives of the State Department of Public Welfare.

Dr. James T. Thompson told the convention that "our state has one of the best battered child laws in the nation," making reference to the association-sponsored enactment which amended the Youth Court Act and covered the neglected as well as the physically battered child.

Underscoring the necessity for the legislation, Dr. Thompson reminded the jurists that prior to the enactment, a dog enjoyed better protection under the laws of the state than did a child. Ironi-

cally, he said, the laws extended protection to a child before birth, for abortion has been a criminal

offense in Mississippi since passage of another association-sponsored bill in 1952.

Dr. Thompson said that successful implementation of the new statute would require full cooperation and close coordination among physicians, hospitals, judges, social welfare workers, and others in official positions. He said that medicine is "acutely aware that this condition cannot be successfully treated by the physician alone, because we recognize that we are dealing with a social as well as a medical condition."

The association president told the judges and social welfare workers that four different battered child bills were introduced before the 1966 regular session of the legislature, ranging from the relatively simple and, in the association's opinion, ineffective measure patterned after the South Carolina law up to the complex, eight page medical association-sponsored amendment to the Youth Court Act.

He said that "we held firmly to the conviction that we wanted physicians to make reports to the courts and to those trained in social work. To us, the idea of routinely reporting to a constable or deputy sheriff would have been to pull the teeth of the act."

Dr. Thompson said that immunity from civil and criminal liability for those making reports was essential to the success of the program. "Without this assurance for physicians, dentists, and nurses acting in good faith," he said, "the entire program would be doomed to failure."

The keynote address included a background summary of the early studies of the battered child by the Kempe group at the University of Colorado School of Medicine as well as a discussion of the multi-level social and family environments where the condition occurs.

More than 40 public officials, including 20 chancellors and county judges, attended the two day meeting at the Hotel Buena Vista. The Judges Advisory Committee to the Department of Public Welfare led discussions on the battered child law



Leaders in discussion of the new battered child law at the Eighth Annual Meeting of Chancery and County Court Judges of Mississippi are, from the left, Judge Carl Guernsey, Mrs. Sarah Caldwell, and Dr. James T. Thompson.

cally, he said, the laws extended protection to a child before birth, for abortion has been a criminal

ORGANIZATION / Continued

and its implementation. Members include Judges L. A. Watts of Pascagoula, chairman; Carl Guernsey of Jackson; Mike Carr of Brookhaven; R. P. Sugg of Eupora; and William Neville of Meridian.

Another featured speaker was Albert J. Olsen of Waltham, Mass., regional director of the Nationwide Study of Child Abuse sponsored by Brandeis University. Mrs. Martha Allred Stennis, consultant to the DPW's Child Welfare Division, and Mrs. Sarah Caldwell, division director, had prominent program assignments.

A panel, consisting of Mrs. Stennis, Judge Watts, and Rowland B. Kennedy, executive secretary of the state medical association, discussed implementation of the new law. Judge Guernsey presided over the panel discussion.

The jurists formally commended the Mississippi State Medical Association for sponsorship of the law and asked President Thompson to have the association continue its studies and legislative program in this and other critical areas where medicine and the law share a common concern.

Preceptor Program Is Operating at UT

A new program of preceptorship for senior medical students in family medical practice has been launched at the University of Tennessee College of Medicine at Memphis.

Dr. M. K. Callison, dean of the medical school, said that the five-week, off-campus program is being offered to students during their final six months before graduation and may be chosen in preference to the five weeks usually spent on-campus in one of the medical or surgical specialties.

Sixty-five Tennessee general practitioners have been approved by the College of Medicine as preceptors. All are located in rural or suburban areas and have access to hospital facilities.

The student sees all patients with his preceptor and is on call 24 hours a day. Dr. Callison said that the program is designed to give the student who is interested in family practice an opportunity to acquaint himself with actual practice situations. The preceptor provides the student-in-residence with room, board, and laundry either in his own home or in a nearby accommodation. Many of the preceptors are providing for the married student's family, although none is obliged to do so.

Both the preceptor and student make written evaluations of the five weeks experience at the

conclusion of the period. Dr. Callison said that the valuable experience "cannot be duplicated in the university setting."

Governor Names New Physical Therapy Board

Two physicians have been appointed to the newly established State Board of Physical Therapy which will license and regulate the practice of the allied profession. Named to serve are Drs. Louis A. Farber and William E. Lotterhos, both of Jackson. Dr. Farber is an orthopaedic surgeon, and Dr. Lotterhos is a general practitioner.

Named also by Governor Johnson are J. T. Gilbert, R.P.T., of Jackson, Mrs. H. C. Kirk, R.P.T., of Hattiesburg, and William H. Petty, R.P.T., of Gulfport.



New appointees named by Governor Johnson to the State Board of Physical Therapy are, from the left, seated, Mrs. H. C. Kirk and William H. Petty. Standing, from the left, are J. T. Gilbert, Dr. Louis A. Farber and Dr. William E. Lotterhos.

Officers of the board are Mr. Petty, chairman; Mrs. Kirk, vice chairman; and Mr. Gilbert, secretary-treasurer.

The new physical therapy licensure law was enacted by the 1966 regular session of the legislature and was supported by the Mississippi State Medical Association. Appointees to the board are fixed by statute as two physicians who must be members of the state medical association and three physical therapists who must be members of the state chapter of the American Physical Therapy Association.

Placement Publication Is Launched by MSMA

The state medical association's Physician Placement Service has been expanded with publication of the first special bulletin announcing both practice location opportunities and data on physicians desiring to locate in Mississippi. Spokesmen at the Jackson Central Office said that the bulletin would be published bimonthly.

Sixteen location opportunities are listed in the first issue of the publication which also carries data on 31 physicians who are seeking locations in the state. Specialties represented among those listed include anesthesiology, general practice, internal medicine, neurological surgery, obstetrics and gynecology, ophthalmology, orthopaedic surgery, otolaryngology, pediatrics, plastic surgery, psychiatry, general surgery, and urology.

The Physician Placement Service has been operated as a service to Mississippi communities and the profession since 1951. Serving as an information exchange between those seeking a physician and physicians who desire a Mississippi practice location, PPS has assisted in placement of a substantial number of practitioners. No fees are charged for the service.

The new bulletin is being distributed only to those who have requested PPS assistance and to component medical societies. Complimentary subscriptions will be furnished any member of the association requesting the service.

Dr. Campbell Is New ACCP Veep

Dr. Guy D. Campbell of Jackson has been elected vice president of the Southern Chapter of the American College of Chest Physicians. He is chief of the Pulmonary Disease Section of the Jackson Veterans Administration Center and coordinator of the Regional Medical Program in heart disease, cancer, and stroke at the University Medical Center.

The election came at the annual meeting of the College at Washington, D. C.

Dr. Campbell has served as a member of the VA Center staff since 1953, and he is also clinical associate professor of medicine at the University of Mississippi School of Medicine. Recently, he was named to head the regional program in heart disease, cancer, and stroke.

A native of Lauderdale County, Dr. Campbell received his B.S. degree from Ole Miss where he also attended the two year medical school at Oxford. He received the M.D. from Harvard Medical School and his postgraduate training at New Orleans. He is a diplomate of the American Board of Internal Medicine and the subspecialty Board of Pulmonary Diseases.

Dr. Moses Is AHA Medical Director

Dr. Campbell Moses, Jr., associate professor of medicine at the University of Pittsburgh School of Medicine, has been named medical director of the American Heart Association.

Dr. Moses has obtained leave from his teaching duties at the University January 1 to assume his heart association post. He will retain his academic title and continue as director of the Addison H. Gibson Laboratory and of Postgraduate Medical Education at the University.

In his new position, Dr. Moses will be responsible for planning and directing the medical, scientific and postgraduate medical education programs of the American Heart Association. He succeeds Dr. George E. Wakerlin who retired last August as the association's medical director.

Known for his work in internal medicine and atherosclerosis, Dr. Moses devotes much of his time to postgraduate medical education. Since January, 1963, he has directed a weekly television series intended to keep practicing physicians abreast of the latest medical techniques. The program reaches an estimated 1,400 physicians weekly in Western Pennsylvania, Ohio and West Virginia.

A native of Swissvale, Pa., Dr. Moses obtained the B.S. and medical degrees from the University of Pittsburgh. Following his internship at the University he became instructor in physiology and pharmacology from 1942-47, when he was made assistant professor of medicine. He attained associate professorship in 1950 and was named chief of the University's Peripheral Vascular Clinic in 1958.

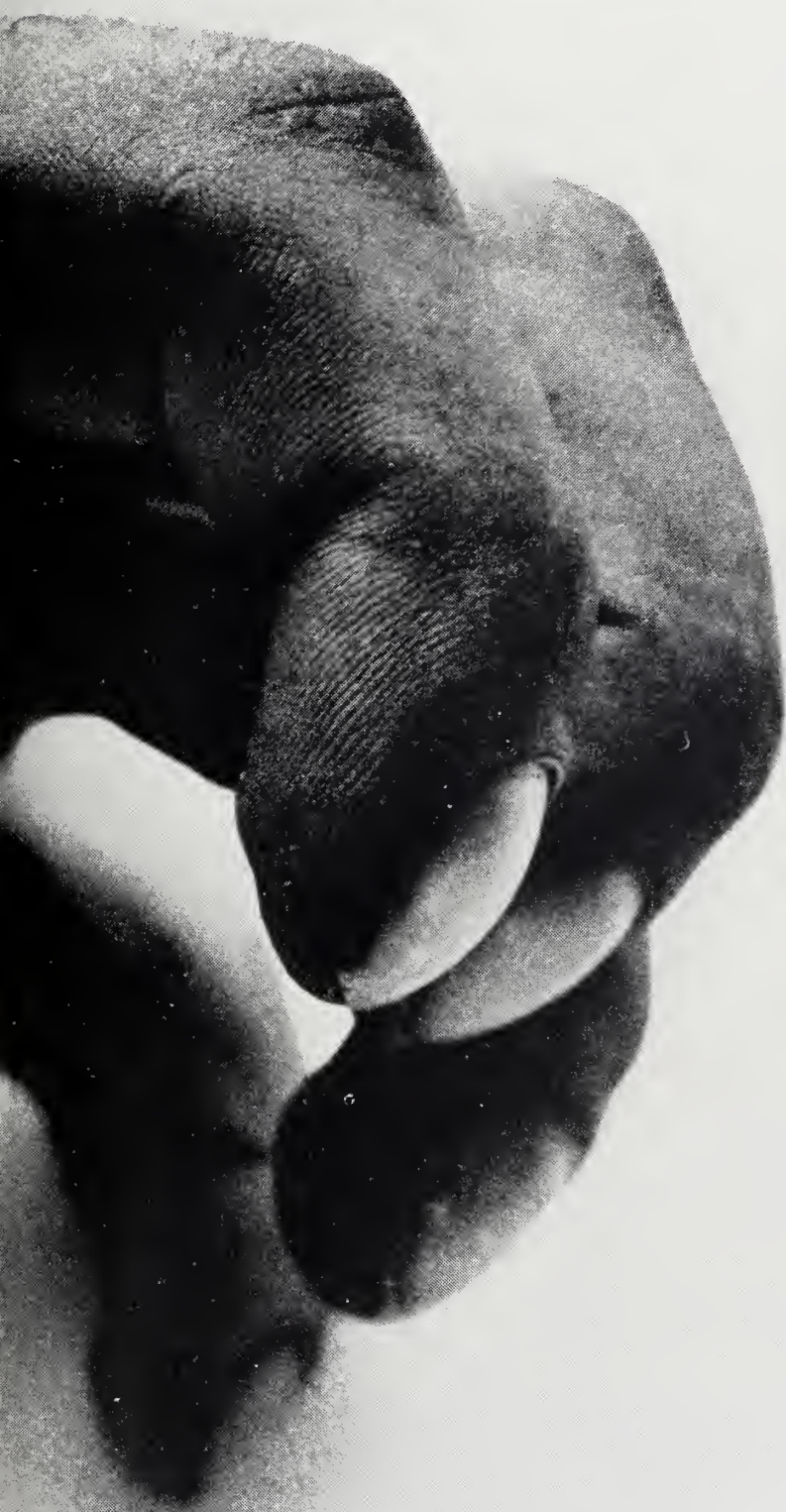
Dr. Moses has served the American Heart Association for many years as a volunteer on key committees and scientific councils. He has been a member of the association's board and executive committee, is past chairman of the executive committee of its Council on Arteriosclerosis and of its Medical Education Committee.



fluocinolone acetonide — an original steroid from

SYNTEX 
LABORATORIES INC., PALO ALTO, CALIF.

controls infected inflammatory dermatoses that start from scratch



The "itch-scratch" cycle usually associated with inflammation often results in infected dermatoses because broken skin surfaces are particularly vulnerable to pathogenic bacteria.¹ To treat infected inflammatory dermatoses, Neo-Synalar Cream combines the most active topical corticosteroid with a highly reliable antibiotic generally reserved for topical application.

In Neo-Synalar, fluocinoline acetonide controls the inflammation and provides rapid relief from associated pruritus. At the same time, its antibacterial component—neomycin—combats superficial infection caused by many gram-positive and gram-negative bacilli² that often colonize and thrive on abraded skin.¹

A specially formulated vanishing cream base that is greaseless and odor free makes Neo-Synalar cosmetically appealing, and encourages greater patient cooperation.

controls the infection

stops the scratch

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Neomycin rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Neo-Synalar under certain conditions. **Availability:** Neo-Synalar Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

References: 1. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. 2. Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.

Neo-Synalar[®]

(fluocinolone acetonide-neomycin sulfate cream)

Cream

Lederle Book Hits Tuberculosis

A new booklet, designed to stimulate active participation in the effort to eradicate tuberculosis, is currently receiving widespread distribution throughout the United States.

Produced by Lederle Laboratories, division of American Cyanamid Company, the 20-page booklet is entitled "A Gift to the Future."

The publication offers "a working plan to help eradicate tuberculosis" and highlights the importance of tuberculin testing of all school children. A special appendix provides information on school tuberculosis testing programs in the 50 states. The booklet also gives background information concerning the disease itself and facts about the overall nationwide program for its eradication.

"A Gift to the Future" is being made available to state health officers, medical societies, members of Congress, the national headquarters of various civic organizations and state and local tuberculosis associations. Additional distribution of the

publication will be made available to school administrators and parent-teacher organizations.

The booklet was prepared by the Physicians Community Service at Lederle Laboratories, Pearl River, N. Y. Single copies are available upon request.

NSPB Sets 1967 Annual Meeting

"Setting Sights for Sight Saving," is the theme of the 1967 Annual Conference of the National Society for the Prevention of Blindness which will be held April 12 through 14, at the Christopher Inn, Columbus, Ohio. More than 400 professional and volunteer workers in the prevention of blindness field are expected to attend.

During the conference, members of the medical and allied professions from across the nation and throughout the world will participate in a program highlighting the latest developments in blindness prevention. Papers will be presented on industrial and school eye safety; community action for eye health; progress in detecting and combating potentially-blinding eye diseases. Both physicians and scientists will conduct panel dis-

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761

cussions. Details on topics and speakers will be announced.

Included in the three-day national meeting will be a scientific and technical exhibit program.

The National Society for the Prevention of Blindness, founded in 1908, is the oldest voluntary health agency nationally engaged in the prevention of blindness through a comprehensive program of community services, professional and public education and research.

Peritoneal Dialysis Unit to Be Available

Successful trials of a new, portable automatic kidney machine, which could help alleviate a shortage of kidney machines, have been completed at the Cardiff Royal Infirmary in Wales. Built by the Industrial Automation Division of Hawker Siddeley Dynamics Ltd., in association with Dr. G. A. Mallick and Dr. G. A. Coles of the Welsh National School of Medicine, the machine will cost about \$2,200 when full production is reached in May or June of 1967.

To be called the Cardiff machine, the equip-

ment uses the peritoneal dialysis technique.

Previously, the repeated peritoneal dialysis liquid changes have been made every hour by a nurse who has had to be in constant attendance for 12 to 24 hours. The new machine has been designed to conduct the sequence automatically and as comfortably as possible, over a period of up to 24 hours, reducing the need for constant observation of the patient by a nurse. Temperature and pressure of the dialysis fluid is monitored as it is automatically pumped to and from the patient, and the amount of liquid transferred is continuously recorded. Fail-safe alarms operate under emergency conditions.

Complete sterility is maintained for the patient by means of assembling into the machine a pre-sterilized pack of plastic tubing which is subsequently discarded. This eliminates the need to sterilize other parts of the machine since the aqueous solution is completely contained in a sterile environment.

Hawker Siddeley Dynamics is a member company of Hawker Siddeley Group. Last year the British organization had sales of more than \$1-billion from a wide range of products including aircraft, missiles, electronic equipment, diesel engines, plastics and automation equipment.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 595-1151

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL:

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA



Let's get
down to earth
about
diuretics

With Hygroton, you'll discover that you can almost always use fewer tablets than is possible with other diuretics.

You may be told that a new short-acting diuretic was found more effective than Hygroton in congestive heart failure—but this was when twice the manufacturer's maximum recommended dose was given.* At the maximum recommended dose for both diuretics, two tablets of Hygroton were far and away more effective than five tablets of the other diuretic in producing diuresis and weight loss. And at these dosages, Hygroton costs only 1/3 as much as the other diuretic.

Since the discovery of chlorothiazide, the trend has been away from short-acting, multiple-dose, high-cost diuretics. With Hygroton you can usually do the job with just one tablet a day, or every other day.

More than any of the newer diuretics, Hygroton brings dosage and cost of medication down to earth.

West, A. N., et al.: J. New Drugs 5:329, 1965.

Hygroton® chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water. **Contraindications:** Hypersensitivity and most cases of severe renal or hepatic disease. **Warning:** With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind. **Precautions:** Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe chronic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. **Side Effects:** Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration. **Average Dosage:** One tablet (100 mg.) with breakfast daily or every other day. **Availability:** Tablets of 100 mg. in bottles of 100 and 1000. For full details, see the complete prescribing information. 6524-V(B)

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, New York

Geigy

La., Miss. Internists Set ACP Meet

The American College of Physicians (ACP) will hold a regional scientific meeting for internists in Louisiana and Mississippi Feb. 24-25, 1967. The meeting will be in New Orleans, La.

The Louisiana-Mississippi meeting is one of 30 scientific meetings sponsored each year by the ACP in the United States, Canada and the Far East. It serves to help keep College members in Louisiana and Mississippi abreast of developments in the basic sciences and clinical medicine. The ACP nationally represents some 13,000 specialists in internal medicine and related fields.

Dr. G. Gordon McHardy of New Orleans, La., ACP governor for Louisiana and clinical professor of medicine, Louisiana State University School of Medicine, and Dr. Wesley W. Lake, Sr., of Gulfport, Miss., ACP governor for Mississippi and associate professor in medicine, Tulane University, are in general charge of the meeting.

Dr. Irving S. Wright of New York, N. Y., ACP president and clinical professor of medicine at

ETV System Links Five Medical Units

A \$100,000 contract to link five medical facilities in the Atlanta, Ga., area in the nation's first 2,500-megacycle television system for exchanging instructional programs has been announced by the Radio Corporation of America.

Two of the five locations—Grady Memorial Hospital and the Public Health Service Audio-visual Facility, U. S. Department of Health, Education and Welfare—will be equipped with transmitters for originating programs, and all five stations will have receiving systems.

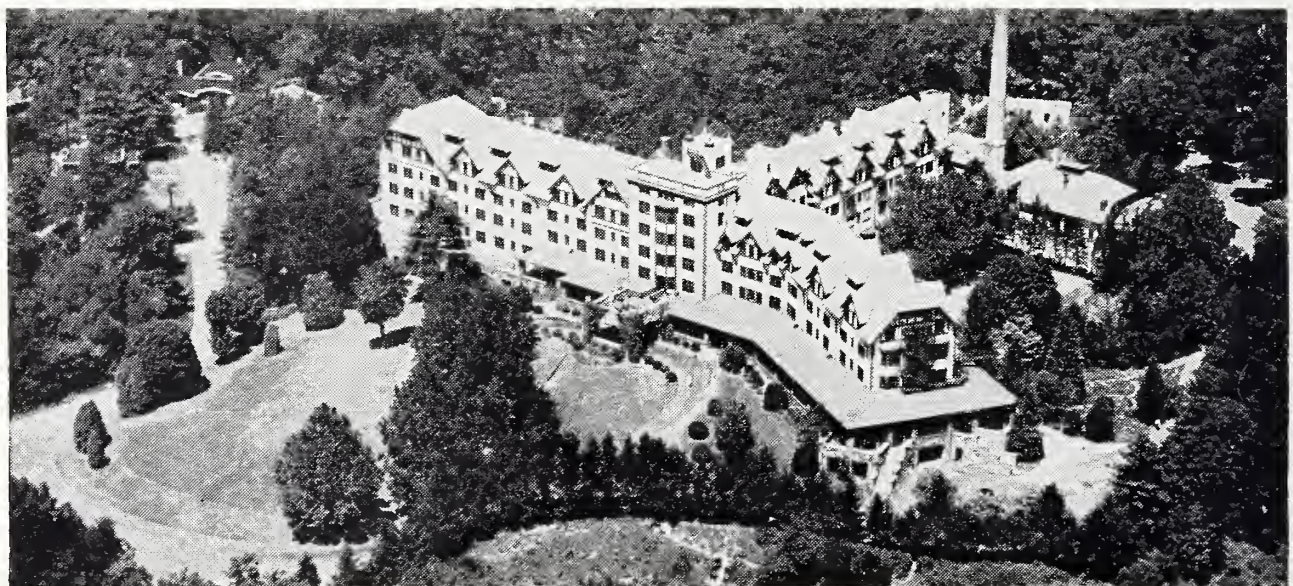
Other participants in the network are the Veterans Administration Hospital, Emory University School of Medicine and Hospital, and the Georgia State Department of Health with its Mental Health Institute. Roof-top antennas and "down converters"—devices that change the 2,500 megacycle signals to a frequency that can be picked up by a standard TV set—will provide program reception at all locations.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

Auxiliary Sponsors Leadership Workshops

Stressing the theme, "Interested, Informed, Involved," officers of the Woman's Auxiliary to the Mississippi State Medical Association are conducting a series of workshops at district level for leadership training, increasing communications effectiveness, and for exchange of ideas and information with the membership.

Mrs. J. Gordon Dees of Jackson, state Auxiliary president, said that three meetings have been conducted with further workshops scheduled. Typical of the working sessions, she said, was the recent pre-Christmas conclave at Biloxi.

Mrs. Dees told the leadership group that physicians' wives are recognized as leaders in the field of health education. "When we serve well, we reflect the doctors' concern for good medical care and the betterment of health in the community," she added.

The president underscored the need for Auxiliary members to be informed and to be knowledgeable of community service programs. She urged support for the nurse recruitment aspect of the overall health careers program, the Auxiliary's principal project for the year.

State participants included Mrs. David L. Clippinger of Hazlehurst, president-elect; Mrs. John G. Egger of Drew, Community Service chairman; Mrs. A. E. Brown of Columbus, AMA-ERF chairman; Mrs. Steve Sekul of Biloxi, Health Careers chairman; and Mrs. Dees. In addition, Auxiliary leaders from the Coast units participated.

Mrs. Clippinger emphasized membership, pointing out that the Auxiliary rolls list less than 900 members against the state medical association's more than 1,400. Her duties as president-elect also include those of state membership chairman. She said that reasons frequently given by physicians' wives who have not joined are that there are too many meetings, that Auxiliary



Woman's Auxiliary officials participating in the Biloxi leadership workshop are, from the left, Mrs. John G. Egger of Drew, Community Service chairman; Mrs. David L. Clippinger of Hazlehurst, presi-

dent-elect; Mrs. J. Gordon Dees of Jackson, president; Mrs. A. E. Brown of Columbus, AMA-ERF chairman; and Mrs. Steve Sekul of Biloxi, Health Careers chairman.

How long will it take him
to recover from the flu
if he just doesn't care?





Weighing on his mind, too

TABLETS

Equagesic[®]

(meprobamate and
ethoheptazine citrate with
aspirin)



Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

When pain evokes anxiety and tension, thereby heightening patient discomfort, a simple analgesic may only touch on part of the problem.

This single-prescription, non-narcotic product, however, usually provides effective analgesia *and* helps put the patient's mind at ease.

ORGANIZATION / Continued

activities are not interesting, that the wife works, or that she has not been invited to join.

Mrs. Clippinger urged local leaders to make programs interesting, to show how Auxiliary membership can benefit the physician-husband's professional career, and to help physicians' wives fulfill a role in community leadership and service.

Mrs. Egger led a discussion on community service activities, including health education, communications, and concerted action at the local level to furnish reliable information on problems involving venereal disease, chronic illness, development of physical fitness in youth, and other service activities.

Mrs. Brown outlined Auxiliary opportunities to aid and assist AMA-ERF, pointing out the foundation's work in biomedical research, student and postgraduate loan programs, and aid to medical education. She described programs which may be conducted in the community by Auxiliary units which will raise funds for the foundation.

Mrs. Sekul spoke on the health careers program, the major Auxiliary project for the 1966-67 organization year. She made reference to state and national needs in the medical and allied professions and urged activity in nurse recruitment. Particular emphasis was placed on working with young people, especially of high school age.

Neurological Disease Seminar Set at UMC

Neurological diseases will be the subject of a continuing education seminar to be presented at the University of Mississippi Medical Center Feb. 23.

Guest essayists who will help teach the day-long session are Dr. William S. Fields of Houston, professor of neurology at Baylor University College of Medicine, and Dr. Robert A. Utterback of Memphis, professor of neurology at the University of Tennessee College of Medicine.

Dr. Robert E. Carter, newly appointed dean of the school of medicine and director of the Medical Center, will welcome visiting physicians following registration at 8:30 a.m. in the school of medicine foyer. Morning sessions will deal with headaches and weakness and will include a panel discussion on the treatment of headaches. Dr. Robert Currier, associate professor of medicine, will moderate the discussion.

Afternoon lectures will be devoted to the study of strokes.

**DIARRHEA
MUCOUS COLITIS
DIVERTICULITIS
SPASTIC URETERITIS
BLADDER SPASM**

are relieved with.....



Trocinat[®]
BRAND THIPHENAMIL HCl

Minimum dosage 400 mg., q. 4 h. until relief is constant, adjust maintenance dosage.

A therapeutic blood level cannot be obtained with small dosage. Trocinat is metabolized and eliminated in the urine as harmless degradation products—a safety factor. Sixteen years of clinical usage with the absence of untoward effects establishes the safety of Trocinat. The autonomic nervous system is not involved in its prompt action.

NOW AVAILABLE IN 2 STRENGTHS,
100 mg. and 400 mg.
PINK SUGAR-COATED TABLETS

Literature and samples available.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856

Index to Advertisers

In accepting advertising for publication, the JOURNAL has exercised reasonable precaution to insure that only reputable, factual advertisements are included. Nevertheless, claims made by advertisers in behalf of goods, services, and medicinal preparations, apparatus or physical appliances are understood to be those of the advertiser. Neither sanction nor endorsement of such is warranted, stated, or implied by the association.

	Page
Abbott Laboratories	104, 105, 106
Ames Company	108D
Appalachian Hall	116
Blue Cross	6, 7
Bristol Laboratories	23
Burroughs Wellcome	10A
Ciba Pharmaceuticals	108A
Continental Casualty Co.	10
Dorsey Laboratories	100A, 100B, 100C, 100D, 116A
DuPont	84A, 84B, 84C
First Federal of Jackson	11
Geigy Pharmaceuticals	114, 115
Highland Hospital	112
Hill Crest Hospital	113
Hynson, Westcott, and Dunning	3
Kay Surgical	21
Lederle Laboratories	14, 24H, 85
Eli Lilly front cover, 10B, 10C, 10D, 18, 116B, 116C, 116D	
Wm. S. Merrell Company	118, 119
Neisler Laboratories	103
Parke, Davis and Company	2
Pitman-Moore	8, 9
William P. Poythress	20
Riker Laboratories	93
A. H. Robins Company	insert facing 112
Roche Laboratories	108B, 108C, back cover
J. B. Roerig and Company	16, 17
William H. Rorer	22, 98, 99, 106
G. D. Searle	center
Smith, Kline & French	15
Syntex Laboratories	12, 13, 110, 111
Winthrop Laboratories	4
Leonard Wright Sanatorium	89
Wyeth Laboratories	insert facing 14, 19, 90, 91, 95, 120

END BATTERY REPLACEMENTS Newest Welch Allyn

RECHARGEABLE HANDLE

Fits all WA
medium-handle
set cases

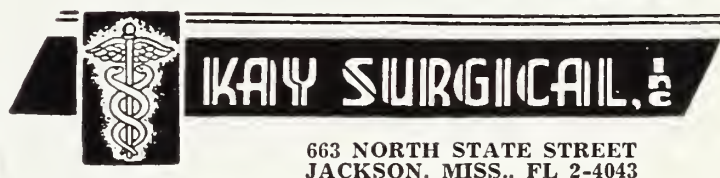
- Provides satisfactory illumination longer between charges than standard medium batteries.

- No separate charger.
- Cannot overcharge.
- May be recharged thousands of times.
- Will never corrode.
- Fits all WA instruments.

No. 717 Rechargeable battery handle\$20.00

No 717-B Extra bottom section 14.50

Also available as part of combination sets.



Space and/or time available in completely equipped, efficiently designed internist's office in established medical center in Jackson, Mississippi, 514-C East Woodrow Wilson.

For sale: One Burdick EK II electrocardiograph with stand. Used only twice. Condition and appearance like new. Box J-1, Journal MSMA.

FAITH FOR OUR TIMES

The office of the dean of men at Arizona State University recently distributed detailed, step-by-step instructions on how certain forms should be filled out. Step 4 read: "Pray that the computer works."

—James Ward, *Jackson Daily News*

ORGANIZATION / Continued

FBI Wants Obese Check Artist

An obese pool shark, John Edward Bradley, Sr., is wanted by the FBI for passing fraudulent checks in interstate commerce. Bradley, also known as John F. Fitzpatrick, is usually accompanied by his three year old son, J. Patrick Bradley, who is believed to require periodic medical care. Bradley, because of his 320 pounds, may also seek professional services.

The wanted man is a white American, aged 51, born June 16, 1915, has graying brown hair, blue eyes, ruddy complexion, is six feet one inch in height with a large build, and has scars over his left eye and on his left knee.

The FBI reports that he carries a .38 caliber revolver in his waistband and should be considered armed and dangerous. He frequents pool halls and is known as a hustler and expert player. He has been employed as a guard, laborer, in-

surance agent, private investigator, and salesman. He has previous convictions for interstate trans-



Physicians are asked to be alert for John Edward Bradley, Sr., shown here, who is wanted by the FBI.

portation of stolen property, forgery, and attempting to commit a felony.

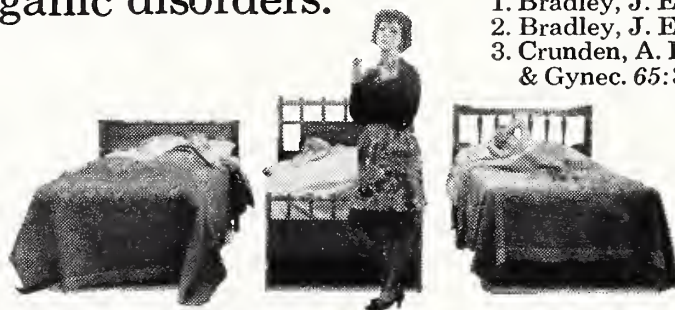
Physicians are urged to report any individual fitting this description to the nearest office of the Federal Bureau of Investigation.



Togetherness....

...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity¹ or side effects^{2,3} and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., et al.: J. Pediat. 38:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. 20:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311 (Feb.) 1953.



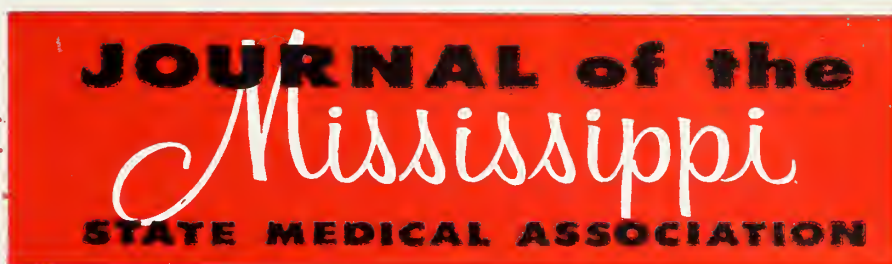
WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol®
phosphorated carbohydrate
solution
emesis control

Volume VIII

Number 3

March 1967



- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
JAMES T. THOMPSON, M.D.
President
TEMPLE AINSWORTH, M.D.
President-elect
JAMES L. ROYALS, M.D.
Secretary-Treasurer
HOWARD A. NELSON, M.D.
Speaker
WILLIAM E. LOTTERHOS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

CONTENTS

ORIGINAL PAPERS

- A Simple Test
to Demonstrate
Pathologic Secretion
of Aldosterone 121 ROBERT BIRCHALL, M.D., and
HUGH M. BATSON, JR., M.D.
- Tobacco: Current
Status in Relation
to Medicine 126 JOHN T. MILAM, M.D.

SPECIAL ARTICLES

- Coronary Heart
Disease: Part II 129 WILLIAM H. ROSENBLATT, M.D.
- Radiologic
Seminar LIX 134 J. V. FERGUSON, JR., M.D.

EDITORIALS

- American Nursing
Home Services:
Profile of Crisis 141 Too Few for So Many
- The Monopoly
Maker 146 Hard-Harted Legislation
- Foibles, Fetish, and
Fallacy Among
the Pros 146 A Taste of Honey
- Tax Automation 148 Transistorized Big Brother

THIS MONTH

- Meetings 133 Where the Action Is
- The President
Speaking 140 Title XIX Meetings
- The Literature 159 New Books Reviewed
- Medical
Organization 163 News of Medicine

Copyright 1967, Mississippi State Medical Association

14 of the reasons why hospital care is better today than ever before:



When you enter a hospital today, a highly trained staff goes into action to help you get well — as fast as possible. Because of better-trained personnel and better equipment for diagnosis and treatment, today's hospitals are far more advanced than the hospitals of ten, or even five, years ago. But along with this medical progress have come higher costs. Blue Cross-Blue Shield, through its wide choice of plans, has kept pace with modern hospital costs. Only your Blue Cross Plan provides "hospital service benefits" . . . which pay for most hospital services in full, regardless of the amount used. Dollar for dollar, Blue Cross-Blue Shield is today's best coverage for hospital and medical bills.



This is one of a series of public service messages — sponsored by Mississippi Hospital and Medical Service, (Blue Cross-Blue Shield), Jackson, Mississippi—designed to highlight our state's hospital and medical progress.

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

March, 1967

Dear Doctor:

Twenty-eight states have initiated Title XIX programs of care for the needy, phasing out the old vendor medical programs. Estimates are that 30 states will have Title XIX by the July 1, 1967, deadline on services which must then be included, and 48 states will have programs by July of 1968.

Capitol Hill observers look for the new 90th Congress to place restrictions on open-end funding for Title XIX. First limitation will probably be in income levels for eligibility which may be set at not more than 50 per cent above welfare levels.

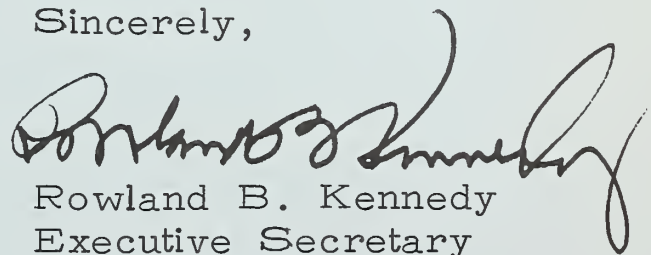
AMA has condemned as coercive the practice of seeking commitment of medical students prior to graduation to residencies in specific specialties. Acting on authority voted by House of Delegates at Las Vegas, the Council on Medical Education is coordinating a single, uniform appointment date, suggesting November 15, for naming interns to first year residencies.

MSMA joined other medical groups in presenting testimony against the Hart bill, S. 260, the so-called "Medical Restraint of Trade Act." The measure would make it unlawful for a physician to sell any drug or device, except for limited dispensing permission for those in rural areas. Core of the bill is concerned with denying ophthalmologists the right to supply patients with glasses.

Medicare patients who paid bills toward their \$50 deductible during the last three months of 1966 may count this against 1967 deductible. The law provides for "carrying over" less than \$50 for credit in the next calendar year. A special rule also makes payments eligible for credit against current deductible for those who had a total of less than \$50 during the past year.

Next regional meeting of interest to Mississippi physicians will be an American College of Surgeons cancer workshop at Memphis on March 31. Program, to be presented at the Sheraton Peabody, covers development of hospital cancer clinic programs and cancer registries.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

'Doctors' Dilemma' Highlights Atlantic City Conclave

Chicago - Recognizing that moral certitudes of yesterday are often the moral issues of today, AMA will sponsor a seminar on "The Doctors' Dilemma in a World of Changing Morals" at the June 18-22 Atlantic City annual convention. Slated for examination are abortion, contraceptives and the coed, unwed mothers, and alcoholism. Program is a project of Department of Medicine and Religion which says neither rightness nor wrongness of the problems will be argued; purpose is to examine the dilemma of the doctor who is confronted with them.

Drug Measures Are Before 90th Congress

Washington - A total of 40 bills relating to drugs have been put into the hopper of the 90th Congress. Provision of outpatient drugs under Part 1-B of Medicare and generic prescribing head the list. One bill, S. 17, would provide for Rx drugs for those over 65, subject to an annual deductible of \$25. Nearly all such bills favor generic prescribing through the back door: Gist is that reimbursement rate would be not for brand name but for nearest generic equivalent.

British 'Blue Shield' Grows

Chicago - Studies made by the National Association of Blue Shield Plans show continuing growth by the British United Provident Association, England's answer to Blue Shield. Over 1.25 million Britishers are now covered under more than half a million contracts, and organization is paying out over \$20 million annually. Main appeal of BUPA is instant medical service instead of long wait which has characterized the National Health Service. As a rule, a British physician can earn as much with 1,500 BUPA-covered patients as he can with his panel of 3,000 NHS patients.

New York Ambulance Code Promotes Safety

Albany - The newly adopted New York Ambulance Code has been hailed as a pioneering measure for patient safety and better care. Code covers vehicles and equipment as well as training standards for drivers and attendants. Latter must now qualify as "emergency medical technicians." Prior to adoption of code, anybody with an old station wagon could go into the ambulance business in New York State.

Tobacco Report Is Skeptical Over Carcinogenesis

New York - Nobody should be surprised that the Council for Tobacco Research, in its 1966 annual report, said that "experimental and clinical evidence to support the thesis that cigarette smoke exercises a direct carcinogenic effect on man has not been forthcoming." Group is sponsored by tobacco companies and has been the chief adversary to medical findings on tobacco and health.



The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE[®] LP



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis

Stetler Warns of Drug Legislation

The president of the Pharmaceutical Manufacturers Association predicted that a legislative battle over proposals for compulsory generic prescribing of drugs and a projected investigation of the drug industry in the 90th Congress would mark an important new stage in the relations between the government and the nation's health team.

C. Joseph Stetler of Washington warned that the harassment and the pressures for government regulation and control which have been directed at the prescription drug industry in the past will now be turned on physicians, drug wholesalers and pharmacists. He spoke before the 1967 Conference on Legislation of the Texas Medical Association.

Compulsory generic prescribing legislation was introduced in the 89th Congress by Senator Russell Long (D.-La.) and others, and is expected to be reintroduced in the present Congress. It would compel physicians to prescribe drugs in generic terms for patients under Medicare or other federally financed health programs for welfare recipients. Pharmacists would be required under the measure to dispense so-called generic drugs regardless of whether the physician orders a specific brand or designates the product of a particular manufacturer.

In addition to consideration of this legislation by the Senate Finance Committee, the industry faces another set of hearings before the Monopoly Subcommittee of the Senate Small Business Committee. These apparently would be virtually unlimited in scope.

"We are facing a hydra-headed threat from two directions," Stetler told the Texas physicians, recalling the Kefauver investigation of 1959-62. He said that inquiry led to the passage of the 1962 amendments to the Food, Drug and Cosmetic Act "which have seriously affected everyone and everything having to do with drugs—whether it be research, discovery, clinical investigation, manufacture, distribution, prescription, dispensing or use."

The PMA official asserted that the compulsory generic legislation would deprive physicians of their historic right to determine the precise treatment for their patients. It would also take away from the patients the assurance they will receive only the best and most suitable medicines for their individual needs, he warned, and it would threaten the future strength and viability of the drug industry itself.

Stetler rejected as misleading and without scientific foundation the claim of proponents of the legislation that drugs from different manufacturers are "equivalent" and will have the same therapeutic effect if they contain the same active ingredient meeting minimum standards set forth in the United States Pharmacopeia or the National Formulary.

"The myth of 'generic equivalence' was exploded long ago," he said. "There is as much difference between drugs with the same generic name as there is between people with the same family name. In the market place there are high quality products and low quality products and many grades in between. Medical, pharmaceutical and other scientific annals, extending back more than 20 years, contain many convincing reports of investigations which persistently support the contention that generic identity does not necessarily assure equal therapeutic effectiveness."

Manufacturer identification has proven itself to be the most practical and reliable measure of trust in the prescribing of drugs, Stetler continued. If the medicine is the product of a quality manufacturer, he explained, the physician, nurse, and pharmacist can be certain that it has been carefully formulated and its production has been rigidly controlled throughout the entire process. Identification of a particular manufacturer also leads to a competition for recognition among quality producers, he added, and this is the patient's strongest safeguard.

"It is impractical with thousands of manufacturers to expect a government agency to guarantee that every product will be of high quality," the PMA official continued. "This would require analyzing every batch of every product made by every company, large or small—an obvious impossibility. Clearly, the public interest must be served by the manufacturer's sense of responsibility, his integrity and the strong motivation to excel which he feels because of a prescribing system that places a premium on product and manufacturer identification."

Stetler noted that a fundamental point in the controversy is being obscured in the debate thus far.

"We do not for a moment claim that all products bearing a brand name are quality products and those sold generically are suspect. Some of the most reputable firms manufacture and market both brand name and generic drugs. Their products are uniformly of high quality. On the other hand, some of the shoddiest firms manufacture preparations by brand names as well as generic names. Their branded products are as questionable as their generic products."



ORIGINAL PAPERS

A Simple Test to Demonstrate Pathologic Secretion of Aldosterone

ROBERT BIRCHALL, M.D., and
HUGH M. BATSON, JR., M.D.
New Orleans, Louisiana

TEN YEARS AGO Conn¹ reported a case of hypertension secondary to pathologic secretion of aldosterone by a solitary tumor of one adrenal gland. Since then the concept of hypertension due to "primary aldosteronism" or associated with "secondary aldosteronism" (in which there is hyperplasia of the zona glomerulosa of both adrenal glands) has been widely accepted. It has been suggested that primary aldosteronism is responsible for approximately 20 per cent of cases of hypertension.^{2, 3} Although this figure seems inordinately high, the exact incidence is unknown. Obviously, the more diligently the diagnosis is sought, the more frequently will aldosteronism be incriminated. Today, it seems unrealistic to wait for potassium wastage to become symptomatic before attempts are made to establish the diagnosis.

The purpose of this report is to offer a simple, inexpensive, reliable "screening test" for aldosteronism that can be performed in any modestly equipped laboratory. It consists of determining, while the patient is on a high sodium diet, potassium clearance before and after administration of spironolactone (Aldactone A[®]). It can be done on office or hospitalized patients and can be used to "screen" all patients with hypertension. It does not interfere with concurrently performed tests to

exclude such diagnoses as pheochromocytoma and renal arterial stenosis.

In order to establish the validity of the method, two patients (Case 1 and Case 2) with a clinically presumptive diagnosis of severe aldosteronism were given a fixed diet containing 69 mEq.

The importance of both primary and secondary aldosteronism in the differential diagnosis of hypertension is becoming increasingly evident. The authors report a simple, inexpensive reliable "screening test" for aldosteronism that can be performed in any modestly equipped laboratory. It utilizes the 24-hour clearance of potassium before and after administration of spironolactone, while the patient is receiving a high sodium diet.

of potassium and 16 mEq. of sodium. An apparently normal person and a patient with proved essential hypertension (Case 3) served as controls and followed faithfully the dietary manipulations of the other two. After a base line period, excess potassium was added to the diet in the form of a potassium supplement and sodium intake was increased by adding weighed increments of salt to the diet. Daily samples of blood and aliquots of 24 urine specimens were analyzed for sodium and potassium content by the automated flame photometric technic. The diagnosis of aldosteronism

From the Department of Internal Medicine, Ochsner Clinic.

Read before the Section on Medicine, 98th Annual Session, Mississippi State Medical Association, Jackson, May 9-12, 1966.

was subsequently confirmed at operation by demonstration of diffuse nodular hyperplasia of the zona glomerulosa in Case 1, and removal of a solitary adrenal adenoma in Case 2. After operation the serum potassium level promptly returned to normal in both patients.

Many measurements were made and examined in detail. Only the two most striking results will be discussed.

K CONCENTRATION FALL

Figure 1 illustrates the step-like fall in potassium concentration in a 24-hour specimen of urine when the diet of the control subject was changed from low sodium to high sodium content, as contrasted with progressive rise exhibited by the two patients.

Figure 2 illustrates the contrast between the 24-hour concentration of potassium in the urine when the effect of a high sodium diet is compared

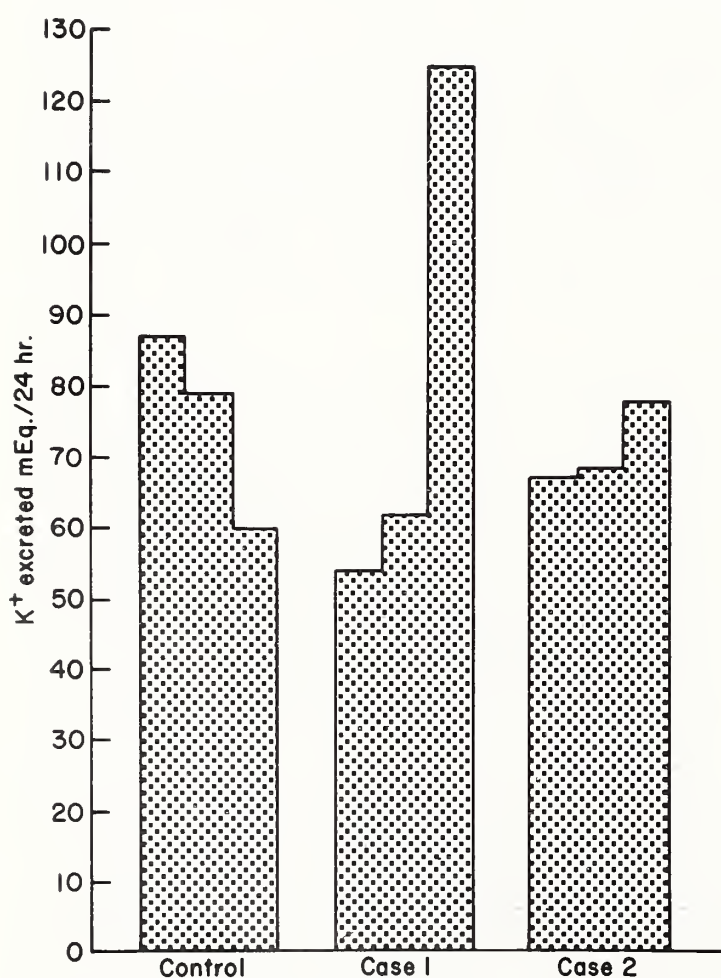


Figure 1. Comparison of the step-like decrease in 24-hour urinary potassium secretion for three days in a control subject receiving a high sodium diet, with the progressive rise in 24-hour urinary potassium excretion in two patients with pathologic secretion of aldosterone under the same conditions (Cases 1, 2).

with a high sodium diet combined with spironolactone. Figure 3 illustrates the contrast in the potassium clearance under the same conditions. Clearly, spironolactone did not suppress the effect of aldosterone in the control subject or in the patient with essential hypertension (Case 3) but did suppress its effect in the two patients with

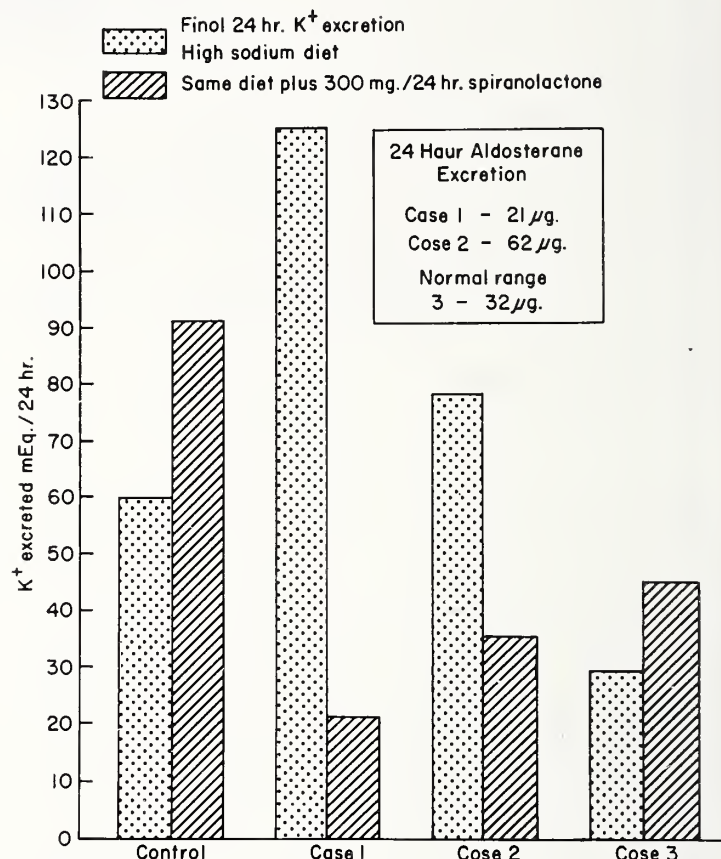


Figure 2. Comparison of the effect of a high sodium diet before and after addition of spironolactone on the 24-hour urinary excretion of potassium in two patients with pathologic secretion of aldosterone with those of a normal person and a patient with essential hypertension (Case 3). Collections were made in the final 24 hours of each period. Urinary aldosterone excretion determinations made at the same time indicate the unreliability of this determination in Case 1.

pathologic secretion (Cases 1, 2). This is shown by the greatly decreased 25-hour urinary potassium excretion and the potassium clearance.

RATIO COMPARISON

Figure 4 is a comparison of the ratio between the potassium concentration in the 24-hour urine specimen before and after administration of spironolactone with the potassium clearance during these two periods. As can be seen, the ratio in the control subject and in the patient with essential hypertension is approximately one whereas each patient with aldosteronism excreted three to six

times as much potassium in the urine before the addition of spironolactone.

The unreliability of the 24-hour urinary aldosterone secretion is illustrated by the normal amount found in the urine of one patient (Case 1) at a time when the test showed him to be secreting more aldosterone than his counterpart (Case 2).

DIETARY MANIPULATION RESULTS

The most sensitive of the many dietary manipulations charted on the two patients and the two control subjects proved to be the response to a high salt diet, particularly when this was compared with the effect of spironolactone. The discussion will be limited to this aspect of the problem.

Differentiation between normal secretion of aldosterone and pathologic secretion due to primary or secondary aldosteronism is predicated on the following observations:

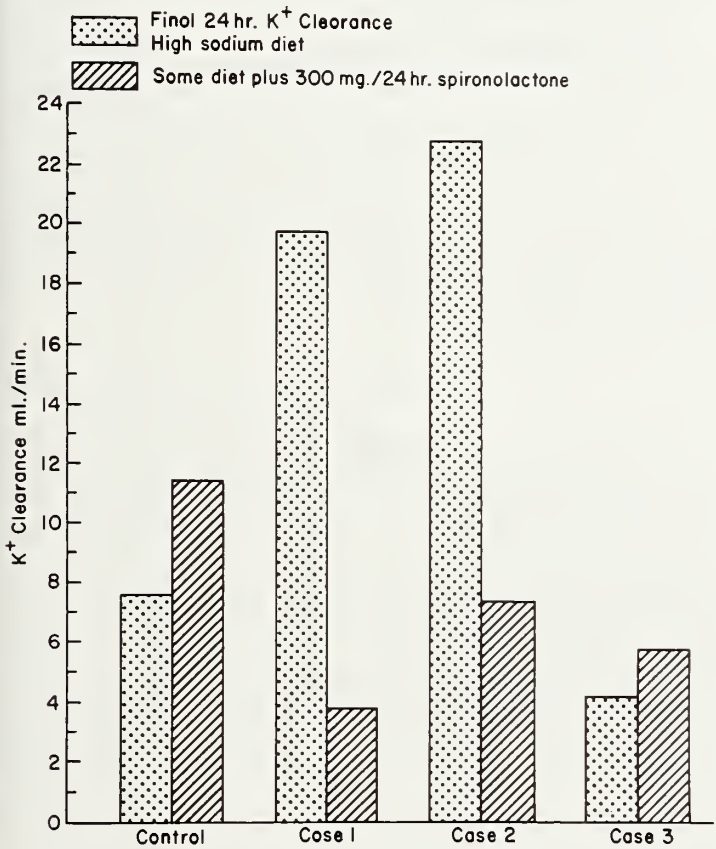


Figure 3. Comparison of the effect of a high sodium diet before and after addition of spironolactone on the potassium clearance in a normal control with two patients with aldosterone secreting tumors (Cases 1, 2) and a patient with essential hypertension (Case 3). Collections were made in the final 24 hours of each period. Urinary aldosterone determinations in the cases with aldosteronism are noted in box.

The normal stimulus for release of aldosterone is a decrease in volume, pressure, or "stretch" as interpreted by the renal juxtaglomerular cells.⁴

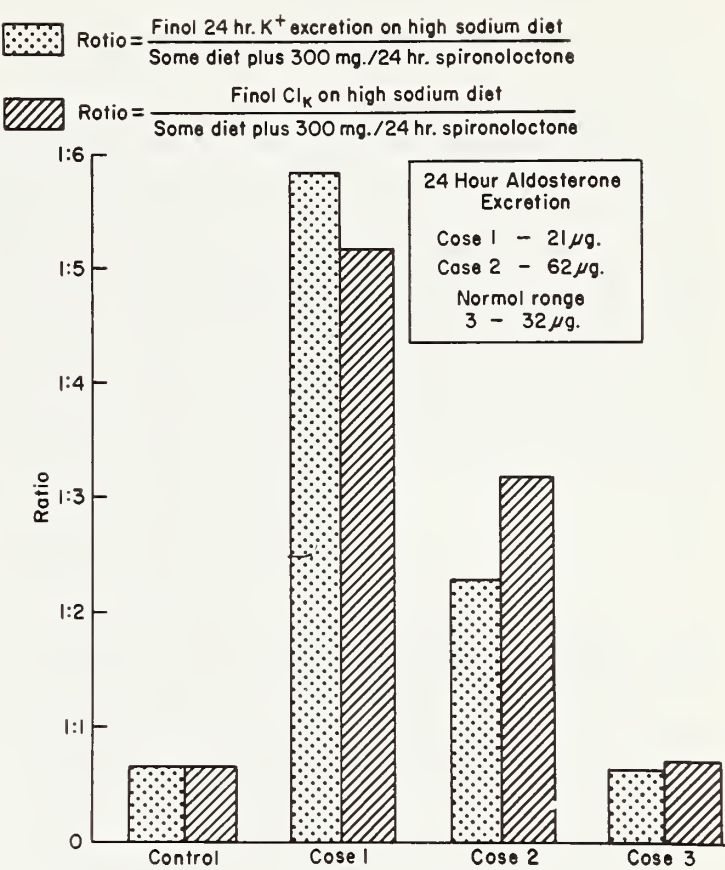


Figure 4. Comparison of the ratio between urinary potassium excretion on a high sodium diet with and without addition of spironolactone, and the potassium clearance under the same conditions. Collections were made in the final 24 hours of each period.

This results in increased granularity of the juxtaglomerular cells, liberation of renin, and subsequent formation of angiotensin I and finally angiotensin II. Angiotensin II is the most potent stimulus for release of aldosterone.^{4, 5, 6, 7} This mechanism can be either stimulated by a low salt diet or completely suppressed by a high salt diet. Thus, if the control subject were abruptly given a high salt diet, one could confidently anticipate a progressive fall in the 24-hour urinary excretion or clearance of potassium (Figure 1). After complete inhibition of secretion of aldosterone by three days of a high salt diet, spironolactone should be virtually without effect on the 24-hour excretion or clearance of potassium (Figure 2, 3).

PATHOLOGICAL SECRETION

A patient with primary or secondary aldosteronism is by definition secreting aldosterone pathologically. The secretory rate is therefore no longer under dietary control and is largely unaffected by either a low or high salt diet. It must be remembered, however, that aldosterone simply "sets the switch" in favor of the exchange of potassium for sodium in the distal renal tubule.^{8, 9, 10, 11} The magnitude of the exchange depends on the number

of sodium ions reaching the distal tubule. Therefore, with a low sodium diet the 24-hour urinary potassium excretion and clearance will fall, and with a high sodium diet it will rise—exactly the opposite of the normal response. A high sodium diet should therefore result in maximum excretion or clearance of potassium. Spironolactone now should turn the “switch” to the “off” position, and there should be an abrupt fall in the urinary potassium excretion (Figure 2) and clearance (Figure 3).

NORMAL AND ABNORMAL RELEASE

Thus has nature generously supplied a key for the simple distinction between normal and abnormal release of aldosterone. A high salt diet nullifies the response of the urinary potassium concentration to spironolactone in the normal subject and exaggerates it in a patient whose release of aldosterone is pathologic.

This relationship should be most vividly expressed by comparing the clearance of potassium before and after administration of spironolactone. If aldosterone is present, administration should result in a fall in the urinary potassium excretion and a rise in the serum potassium. When two variables walk in opposite directions, the ratio between them ($\frac{UV}{P}$) should be more sensitive than reliance on either one alone. That it was not more sensitive in Case 1 (Figure 4) was due to failure of his serum potassium concentration to rise while he was receiving spironolactone.

That determination of urinary aldosterone excretion proved to be less sensitive and actually falsely normal in one patient (Case 1, Figures 2, 3) is not surprising in the light of previously reported inaccuracies.^{8, 12, 13, 14} We therefore have devised the following test:

MEASURED SALT INTAKE

For three days the patient eats a select diet. Each morning 9 gm. of salt is weighed and placed in a salt shaker and the patient is instructed to use the entire amount on his food during the next 24 hours. On the morning of the third day a 24 hour urine collection is begun for sodium and potassium. On the morning of the fourth day fasting blood is collected for sodium and potassium determinations. Oral administration of 75 mg. of spironolactone four times a day is begun. The patient remains on a high salt-spironolactone regi-

men for four full days. A second 24-hour urine collection for sodium and potassium determinations is done on the fourth day. Blood for sodium and potassium determinations is collected from the fasting patient on the morning of the fifth day and the diet is discontinued.

Urine collections are made in females with a special collection unit which obviates use of the bed pan. To prevent contamination, collection bottles are especially cleaned with chromic acid rather than potassium chromate.

The test periods for aldosterone, with minor adjustments, can be carried out while other studies are being done. A positive result of this test establishes the presence of pathologic secretion of aldosterone. There are a number of possible causes for this, and a careful differential diagnosis must be made before surgical treatment is contemplated. It is particularly important to exclude, by appropriate tests, renal arterial hypertension as a cause of secondary aldosteronism.¹⁵

The ultimate diagnostic procedure will be accurate determination of the blood level of renin.^{3, 14, 16} This should approach zero in patients with primary aldosteronism, be normal in patients with essential hypertension, and high in those with secondary aldosteronism. Attempts to do this have been many, but the definitive procedure is probably not yet established and is certainly not yet within the grasp of most.

THESIS OF PROBLEM

Finally, the thesis herein presented is obviously an over-simplification of a complex problem. The hormone or hormones liberated by a solitary adrenal adenoma are not necessarily pure aldosterone. Stimuli other than diet determine the normal release of aldosterone. The exchange of potassium for sodium at the level of the renal tubule depends on more factors than the presence of aldosterone (“switch on”) and the availability of Na⁺ ions. Yet the clinician, responsible for establishing a diagnosis and promptly instituting appropriate therapy, must often oversimplify a theory in order to arrive at a practical solution to the problem presented by his patient.

The importance of both primary and secondary aldosteronism in the differential diagnosis of hypertension is becoming increasingly evident. Measurement of urinary aldosterone excretion is expensive, time consuming, and not highly reliable. A simple test is presented which can be used as a “screen” to exclude a diagnosis of aldosteronism in all patients with hypertension. It utilizes the 24-hour clearance of potassium before and after

administration of spironolactone, while the patient is receiving a high sodium diet. It can be done on office or hospitalized patients and does not interfere with concurrently performed tests to exclude renal arterial stenosis as the cause of hypertension.

★★★

1514 Jefferson Hwy. (70121)

This investigation was supported in part by Public Health Service Research grant #HE-06650-03 from the National Heart Institute.

REFERENCES

1. Conn, J. W.: Presidential Address; Painting Background; Primary Aldosteronism, New Clinical Syndrome, J. Lab. & Clin. Med. 45:3, 1955.
2. Sherwin, R.: Present Status of Pathology of Adrenal Glands in Hypertension, Am. J. Surg. 107:136, 1964.
3. Conn, J. W.: Plasma Renin Activity in Primary Aldosteronism, J.A.M.A. 190:222, 1964.
4. Tobian, L.: Relationship of Juxtaglomerular Apparatus to Renin and Angiotensin, Circulation 25:189, 1962.
5. Genest, J.: Angiotensin, Aldosterone and Human Arterial Hypertension, Canad. M. A. J. 84:403, 1961.
6. Laragh, J. H.: Interrelationship Between Angiotensin, Norepinephrine, Epinephrine, Aldosterone Secretion, and Electrolyte Metabolism in Man, Circulation 25:203, 1962.
7. Page, I. H., and Bumpus, F. M.: Angiotensin, Physiol. Rev. 41:331, 1961.
8. Luetscher, J. A.: Aldosteronism, Dis. Month, p. 5, 1964.
9. Conn, J. W.: I. Aldosteronism in Man, J.A.M.A. 183:775, 1963.
10. Conn, J. W.; Knopf, R. F., and Nesbit, R. M.: Clinical Characteristics of Primary Aldosteronism from an Analysis of 145 Cases, Am. J. Surg. 107:159, 1964.
11. Relman, A. S.: Diagnosis of Primary Aldosteronism, Am. J. Surg. 107:173, 1964.
12. Conn, J. W.: Aldosteronism and Hypertension, Primary Aldosteronism Versus Hypertensive Disease with Secondary Aldosteronism, Arch. Int. Med. 107:813, 1961.
13. Gowenlock, A. H., and Wrong, O.: Hyperaldosteronism Secondary to Renal Ischaemia, Quart. J. Med. 31:323, 1962.
14. Conn, J. W.; Cohen, E. L., and Rovner, D. R.: Suppression of Plasma Renin Activity in Primary Aldosteronism, J.A.M.A. 190:213, 1964.
15. Birchall, R.; Batson, H. M., and Anderson, E. G.: Diagnosis of Hypertension Due to Renal Arterial Stenosis, Circulation 29: 6, 1964.
16. Brown, J. J.; Davies, D. L.; Lever, A. F.; Peart, W. S., and Robertson, J. I. S.: Plasma Renin in a Case of Conn's Syndrome with Fibrinoid Lesions, Brit. M. J. 2:1636, 1964.

BALANCED BIRTHDAY

Residents, despite long hours and small stipends, have a great sense of humor. Consider, for example, the time that Menninger Clinic residents toasted Dr. Karl on his birthday by singing, "For he's an adequate fellow, for he's an adequate fellow. . . ."

Tobacco: Current Status In Relation to Medicine

JOHN T. MILAM, M.D.
Cleveland, Mississippi

TOBACCO BY DEFINITION is any plant of the genus *Nicotiana* especially of the species cultivated for their leaves, the most common being *Nicotiana Tobacum*, of South American origin. It is a tall annual with ample ovate or lanceolate leaves and white or pink tubular flowers.

The leaves of this plant are prepared by drying and various manufacturing processes and used for either smoking, chewing, or as snuff. In ordinary cultivation the leaves are dried either separately or on the stalk, tied in bundles (hands) and placed in heaps (bulks) to induce fermentation, which develops the aromas and flavors. The active properties are due chiefly to the nicotine content which is an alkaloid similar to curare.

Tobacco smoking, a practice learned from the American Indian, was introduced into Europe by a Spanish physician named Francisco Fernandez in 1558. Also, Lane, first governor of Virginia, and Sir Francis Drake brought to England in 1586 the materials and implements of tobacco smoking which they gave to Sir Walter Raleigh, through whose influence the habit became quite fashionable during later years.

The physicochemical processes involved when a cigarette, pipe or cigar is being smoked are complete combustion, incomplete combustion, water distillation, heat distillation, condensation, and thermal decomposition. These processes produce a tidal air pollutant that consists of two phases, namely the particulate and the gas. The chief pathogenic chemicals in the particulate are polycyclic hydrocarbons, acids, phenols and nicotine. The chief pathogenic chemicals in the gas are carbon monoxide, ammonia, nitrogen dioxide, and carbon dioxide.

Although cigarettes, cigars, and pipes all involve incinerated tobacco, the differences in the

physical state of the tobacco in each produce varying pathogenicities. The principal differences are as follows:

1. The cigarette requires a fine cut of tobacco showing a much greater number of broken fibers, thus liberating more volatile irritants than the whole leaf would as required by cigar and pipe.

2. The cigarette burns at a temperature of approximately 700° C. as compared to a cigar or

The author notes that the majority of professional societies and public and voluntary health agencies have adopted policies and inaugurated programs to warn the public about the relationship between cigarette smoking and excess mortality. He discusses smoking from the standpoint of the physicochemical processes and the pathogenicity involved and considers what physicians have done and can do to reduce tobacco consumption.

pipe which burns at approximately 400° C. The higher burning temperature yields greater amounts of volatile irritants, acids, and nicotine per unit weight of tobacco.

3. Concerning pH, the cigarette produces an acid smoke as compared to cigar and pipe which produce an alkaline smoke. The acid smoke, of course, is the more potent irritant to the respiratory system.

4. The cigarette is more moist than the cigar or the pipe. This increased moisture yields more nicotine and tar condensate per unit weight.

5. The cigarette requires burning of paper wherein the cigar and pipe do not. This adds more irritants to the tobacco smoke.

6. Most smokers of cigarettes inhale the smoke

Read before the 86th Semi-Annual Meeting, Delta Medical Society, Greenville, Oct. 12, 1966.

wherein cigar and pipe smokers generally inhale little or none. Inhaled smoke will definitely produce greater tissue exposure to pathogenic substances than uninhaled smoke.

Therefore, the above factors, plus disease correlation statistics, definitely establish the cigarette as the chief etiologic agent of tobacco-genic diseases.

The hydrocarbons, phenols, acids, ammonia, and nitrogen dioxide from the cigarette smoke have as target organs the respiratory tract and the upper gastrointestinal tract (via ingestion). The pathophysiological effects of the respiratory tract may or will involve a paralysis of the epithelial cilia, supersaturation of mucous coating, inflammatory mucosal changes, epithelial metaplasia, fibrosis of bronchial wall, airway obstruction, dilatation of alveolar septa, rupture of alveolar septa and finally hypoxia. The pathophysiological effect on the upper GI tract involves inflammatory mucosal changes of these parts. The nicotine from the cigarette smoke has its target effect on smooth muscle, neuromuscular junctions, chemoreceptors, medullary centers, chromaffin system, and the autonomic ganglia.

The pathophysiological effect involved here will be a peripheral vasospasm, hypertension, and tachycardia. The autonomic ganglia stimulation will cause a gastric hyperacidity and an increased gastric secretion. The chromaffin system target effect will cause an increased blood catecholamines and consequently hyperlipemia. The carbon monoxide and carbon dioxide target organ is primarily the red blood cell. The pathophysiologic effect involves an increased carboxyhemoglobin and a decreased oxyhemoglobin leading to a decreased tissue oxygenation.

DANGER OF CIGARETTES

Therefore, from the above, one can readily see that the pathophysiological effects from the cigarette smoke can pose a real and immediate danger especially to those people who already have some form of respiratory disease disorder or gastrointestinal disorder or a cardiovascular disease state. Research has demonstrated a definite relationship and/or correlation between cigarette smoking and certain diseases such as recurrent upper respiratory infections, chronic sinusitis, chronic bronchitis, bronchial asthma, bronchiectasis, pneumoconiosis, pulmonary emphysema, lung carcinoma, esophagitis, gastritis, duodenitis, hiatal hernia, peptic ulcer, lip cancer, peripheral vascular diseases, hypertension, cerebrovascular disease, arteriosclerotic heart disease, valvular heart disease and cor pulmonale.

The fundamental medical fact about smoking is that it sets in motion three major pathological processes, namely—inflammation, metaplasia—neoplasia and sympathomimetic disturbances. Although the heaviest emphasis has been placed in the past on its role in pulmonary carcinogenesis, it actually produces greater morbidity, mortality and economic loss through its inflammatory and sympathomimetic effects rather than the neoplastic effects. The British Ministry of Health states that chronic bronchitis—emphysema is the third greatest cause of death in Britain, with smoking as a leading etiological contender. The American Heart Association estimates that smoking is the greatest threat to life in middle-aged men with incipient or existing coronary artery disease. The Royal College of Physicians regards smoking as an important deterrent to the healing of peptic ulcer.

ROYAL COLLEGE REPORT

After three years of intensive study, the Royal College of Physicians of London reported to the medical profession in 1962 the most critical and comprehensive analysis that had ever been made of the effects of tobacco smoking upon health to that time. Its major conclusions were: (1) The only benefits of smoking are psychological and social; smoking may help avoid obesity, but does not prevent neurosis. (2) Cigarette smoking is a positive factor in lung cancer, chronic bronchitis, peripheral vascular disease and pulmonary emphysema and is definitely correlated with delayed healing of peptic ulcers. (3) A study of British doctors showed that for men age 35 the chances of dying in the next 10 years were 1 in 23 for heavy cigarette smokers and 1 in 90 for non-smokers.

There is no longer any doubt that smoking poses a formidable threat to the nation's health, yet tobacco consumption shows still a definite yearly increase. The most ominous signs indicate that it is now making its full head way in the teen-age group of people; a report indicated that 30 per cent of Boston's seventh to ninth graders were smoking or had smoked at least 10 cigarettes a day. Therefore, in view of reports of this type the single most important weapon to oppose this threat especially in our teen-aged group, as in any other medical problem, would be the practicing physician.

The role of the physician in reducing the health hazards of cigarette smoking has been termed a personal responsibility of every physician in America and the majority of professional societies and public and voluntary health agencies have adopted policies and inaugurated programs to

TOBACCO / Milam

warn the public about the relationship between cigarette smoking and excess mortality. The National Board of Directors of the American Cancer Society at its 1965 annual meeting passed unanimously a resolution recommended by its medical and scientific committees designating physicians as the most significant factor in the nation's efforts to reduce death and disease related to cigarette smoking. This board urged that physicians be asked to participate with their professional organizations in reducing the cigarette habit, that they personally instruct the patients about the dangers of smoking and devote time to instructing youth about these health hazards emphasizing the difficulties in breaking the habit.

Generally speaking, the physician can help his patient break the smoking habit, but on the other hand he can perform no miracles and must often be content with limited success. Since tobacco was discovered in the new world in the 15th century, there have been repeated attempts to legislate, coerce, promulgate, and terrorize smoking out of existence. James I tried it. In 1604, he labeled smoking "A custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and the black stinging fumes thereof

nearest resembling the horrible Stygian smoke of the pit that is bottomless." Popes in the 16th and 17th centuries issued ecclesiastical bans against tobacco. If both the Church and the Crown have been unsuccessful, can we lesser mortals of medicine and science be any less so? Despite the opposition of human nature, it is our duty to try. ★★★

111 North Street (38732)

REFERENCES

1. Sprague, Howard B.: What I Tell My Patients About Smoking. *Mod. Concepts Cardiovas. Dis.* 33: (Oct.) 1964.
2. Perlstein, Irving B.: Smoking and Its Deterrence: A Medical Problem, A Scientific Exhibit.
3. Reports on Tobacco and Health Research, vol. 8 no. 1, Fall 1965.
4. Medical Bulletin on Tobacco, vol. IV, no. 1, Winter 1966.
5. Medical Bulletin on Tobacco, vol. I, no. 1, Winter 1962-63.
6. Medical Bulletin on Tobacco, vol. III, no. 2, Spring 1965.
7. Medical Bulletin on Tobacco, vol. III, no. 1, Winter 1964-65.
8. Medical Bulletin on Tobacco, vol. II, no. 3, Fall 1964.
9. Medical Bulletin on Tobacco, vol. I, no. 2, Spring 1963.
10. Allergic Patient, Cigarette Smoke Increases Carcinogenicity of Chemicals, vol. 4, no. 2 (March-April) 1963.

NEITHER RAIN NOR SNOW

When Lawrence O'Brien was sworn in as Postmaster General at the Hye, Texas, post office, President Johnson remarked that it was here that he mailed his first letter 53 years ago.

"Mr. President," quipped O'Brien, "I'm going to find that letter and deliver it."

Coronary Heart Disease:

Part II

WILLIAM H. ROSENBLATT, M.D.

Jackson, Mississippi

IN ORDER TO FIRMLY establish the diagnosis of myocardial infarction from the electrocardiogram, there must be Q waves which measure 0.04 seconds in width and/or 25 per cent or more of the R waves in the leads representing the infarcted area of the myocardium. If the Q waves measure 0.04 seconds in width and are 25 per cent or more of the R waves, "significant Q waves" are denoted. Without Q waves of the dimensions cited, one cannot firmly establish the presence of myocardial infarction electrocardiographically.

Experimentally, if one were to place an electrode directly on the posterior surface of the left ventricle and simultaneously place another on the anterior surface, in the presence of acute posterior wall myocardial infarction, before actual tissue necrosis has occurred, one would see elevation of the ST segments in the leads representing the posterior surface of the left ventricle.

There would be no significant Q waves since the heart muscle has not yet been destroyed. The lead simultaneously recording over the anterior surface of the left ventricle will show ST segment depression, or "reciprocal ST segment depression." In effect, what we are saying is that whenever there is myocardial injury there will be ST segment elevation in leads representing the injured area and ST segment depressions in leads representing the uninjured area.

You will recall that leads 2, 3 and AVF of the electrocardiogram represent posterior wall potential; the other leads represent anterior wall potential. To illustrate further what we have been discussing, let us assume that a patient presents with retrosternal pain radiating into the neck, down the arms and shows electrocardiographic evidence of ST segment elevation in leads 2, 3 and AVF with

depression of the segments in leads 1, AVL and V4-V6.

In this situation, one might ask how a diagnosis of acute myocardial infarction can be made in the absence of significant Q waves. Actually, early in the type of episode described, infarction of the muscle has not yet developed, only injury; therefore, there will only be ST segment elevation without significant Q waves. Eight to 24 hours later by means of serial electrocardiograms, significant Q waves will be found if true infarction of the myocardium has occurred. In the course of

The author discusses the diagnosis of myocardial infarction from the electrocardiogram and presents significant examples. Several cases are reviewed in the question and answer portion.

acute myocardial infarction, as the myocardial injury begins to subside, the ST segment elevation diminishes, the ST segments returning to the base line, accompanied by ischemic T waves.

It is at this point that accurate description of T waves becomes significantly important. For example, merely describing inversion of the T waves will not carry the impact of describing coved T waves, that is, markedly inverted T waves with symmetrical limbs on either side of the waves. As you know, T waves can become inverted from a variety of factors, such as nervousness or electrolyte imbalance. However, coved T waves are most indicative of severe myocardial damage and usually are found in infarction of the myocardium.

Figure 1 demonstrates the time and voltage markings upon which accurate measurements of the electrocardiographic complexes are made. Figure 2 shows a normal electrocardiographic complex with the conventional terminology of

Adapted from a postgraduate symposium conducted by the author at the University Medical Center, Jackson. Questions and discussion are by the symposium participants.

the waves. Figure 3 shows a record of a perfectly normal electrocardiogram as one would record employing the 12 conventional leads.

Figure 4 shows a tracing taken on a patient with chest pain seven weeks after myocardial infarction and demonstrates the presence of tiny R waves in V1 with practically no progression in V2; the R waves being entirely absent in V3. These QS deflections where the R waves have become lost represent the so-called "electrical window"

MEASUREMENT OF THE ECG

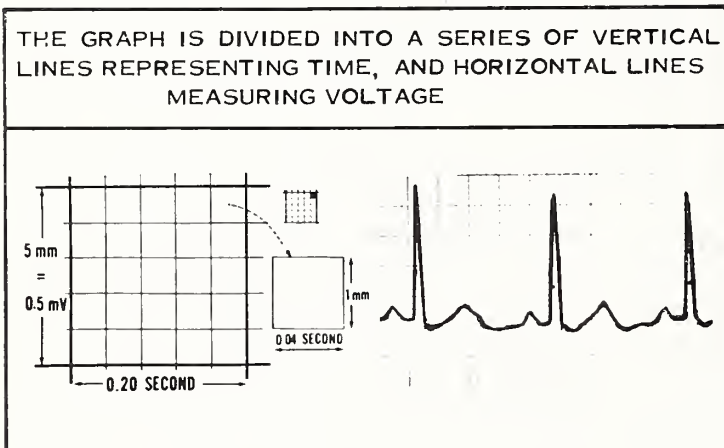


Figure 1

where negative cavity potential is being transmitted directly to the exploring electrode. The ST segment elevation that would have been present initially at the time of the acute infarction is now, at seven weeks post infarction, gone. Note the

NORMAL ELECTROCARDIOGRAM CONFIGURATION

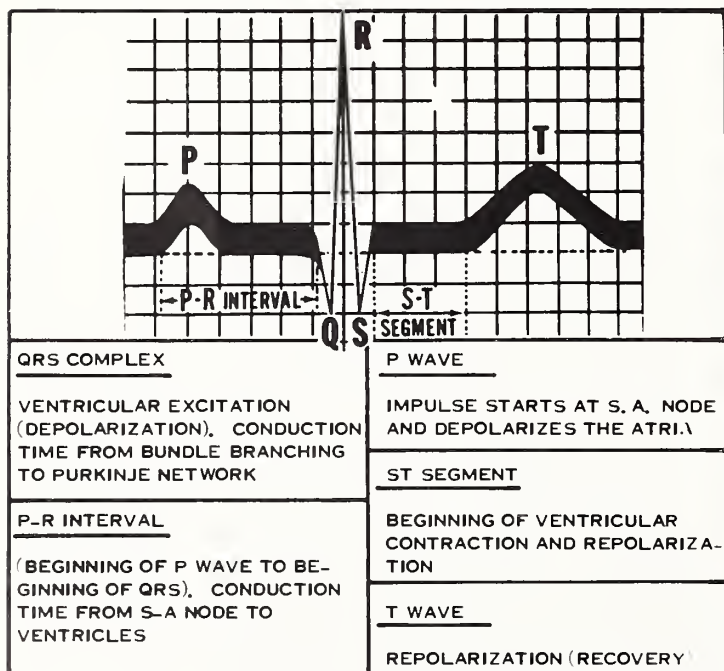


Figure 2

coved and inverted T waves in the chest leads, also the T wave inversion in leads 1 and AVL. Inspecting this tracing, one might therefore state

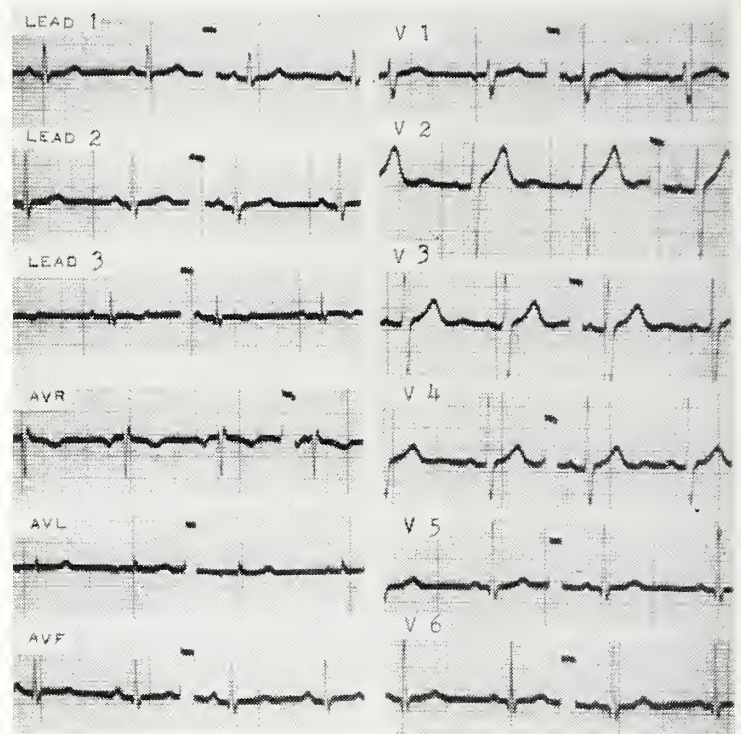


Figure 3

that it is an abnormal record and diagnostic of the evolutionary changes of a recent antero-septal myocardial infarction.

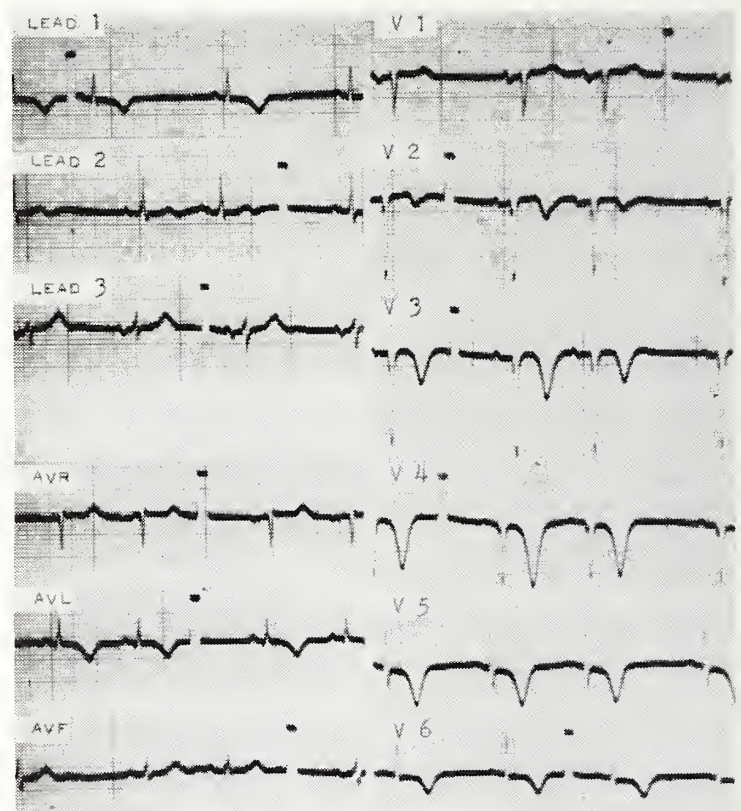


Figure 4

In Figure 5, we see the presence of deep, wide Q waves in leads 2, 3, AVF and V2-V3. The ST segments are elevated in leads 2, 3, AVF and

V1-V4. There are actually only two conditions that can produce this sort of electrocardiographic picture: (1) a true septal infarction which produces changes of an anterior infarction in those leads representing anterior wall myocardial potential (leads 1, AVL and the chest leads) and also changes of a posterior wall myocardial infarction (leads 2, 3, and AVF) and (2) an old posterior wall myocardial infarction coupled with an antero-septal myocardial infarction—in other words, two separate myocardial infarctions.

T-WAVE INVERSION

Figure 6 shows inverted T waves in leads 1, AVL and V5 with coving and inversion of the T waves in V2-V4. There are only tiny R waves in V1, which, of course, is normal. However, in V2 the R waves should be considerably taller than they are. In V3 only negative deflections or QS deflections are noted. The ST segments are

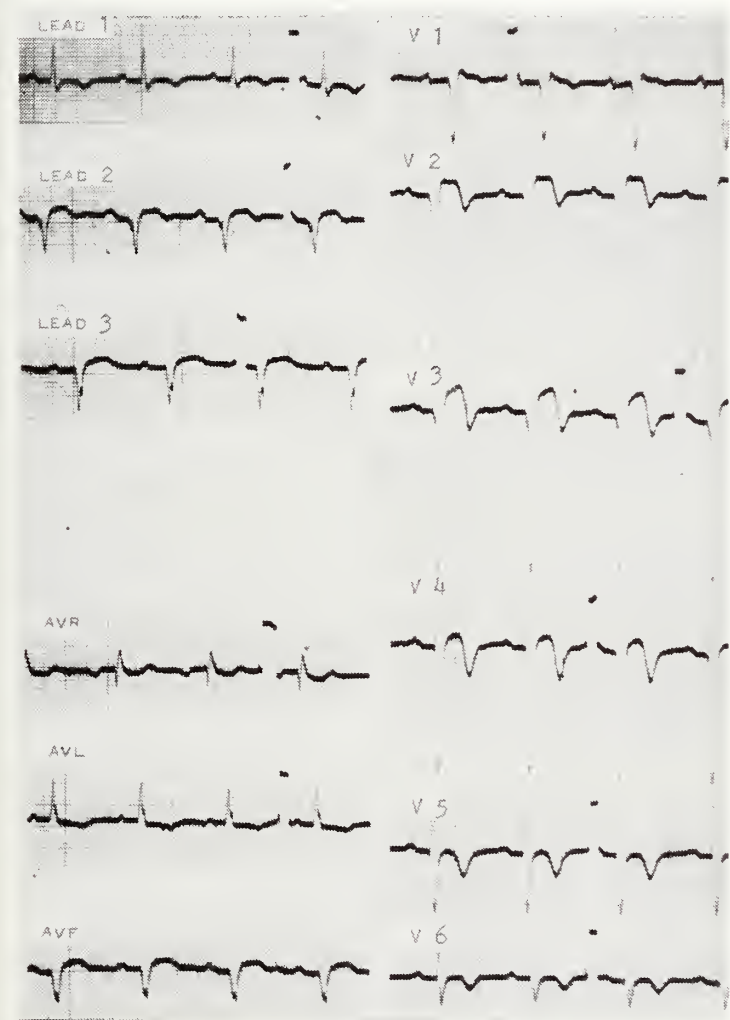


Figure 5

not elevated, so the myocardial injury is no longer present, only changes of infarction and ischemia being seen. This tracing is therefore compatible with the evolutionary changes of an antero-septal myocardial infarction.

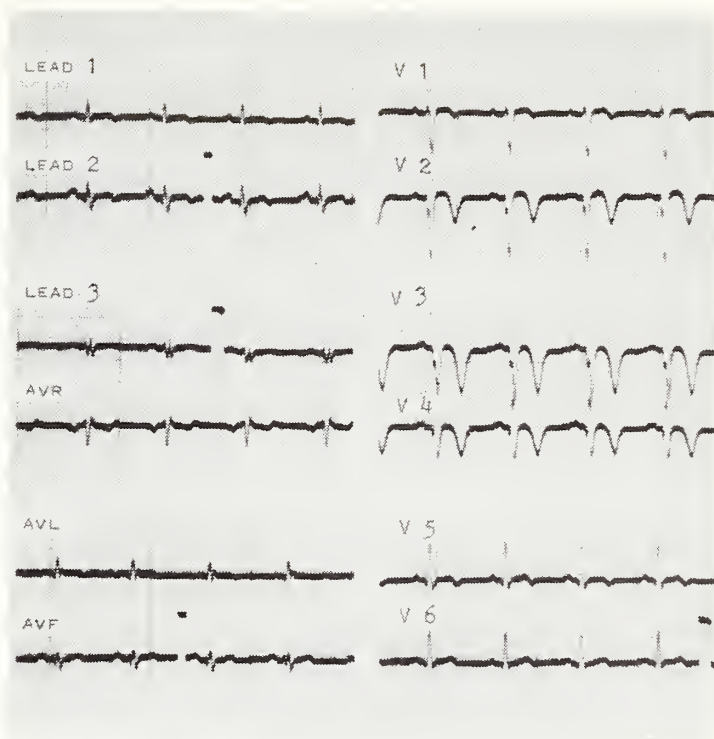


Figure 6

QUESTIONS AND ANSWERS

Dr. Cyril A. Walwyn: "Does this mean that one can get some idea of the prognosis in this condition?"

Answer: "No. I am glad you have brought that up. Looking at the electrocardiogram all one can say is that the individual did or did not have a myocardial infarction; one cannot prognosticate regarding the extent of myocardial infarction on the basis of electrocardiographic changes alone."

Dr. Joseph C. McGehee: "Assuming that the patient lived for some length of time, how much of this abnormality would remain?"

Answer: "I would say that 90 per cent of the individuals with what you see here will continue to manifest evolutionary changes on the electrocardiogram at the end of a four-week period. About 10 per cent might revert to normal sometime later. Not uncommonly, we see persistent ST segment elevation a year or two after a myocardial infarction. In such cases one should suspect ventricular aneurysm. In other words, the ECG pattern of infarction, the Q waves plus ST segment elevations and terminal T wave inversion, when found after a period of a year or more post-infarction almost always reflect ventricular aneurysm."

Dr. Rosenblatt: "In Figure 6 the individual had chest pain lasting for one hour eight months before the tracing was run. What do you see that strikes you in this tracing?"

Dr. Morris Isaacson: "There is a QR in leads 2 and 3 with inverted T waves in these leads. The record is consistent with a stabilized posterior wall infarction."

Dr. Rosenblatt: "That is certainly correct. In other words, we find deep, wide Q waves measuring 0.04 seconds and making up at least 50 per cent of the R waves in lead 2. In lead 3 there are tiny R waves but in AVF the Q waves are very wide and deep, making up close to 60 per cent of the R waves. The ST segments are not elevated. The T waves are inverted in leads 2, 3 and AVF, and the rest of the tracing is essentially normal. We no longer see ST segment elevation indicative of myocardial injury; we see the Q waves of infarction and the T waves of ischemia, only in leads representing posterior wall potential,

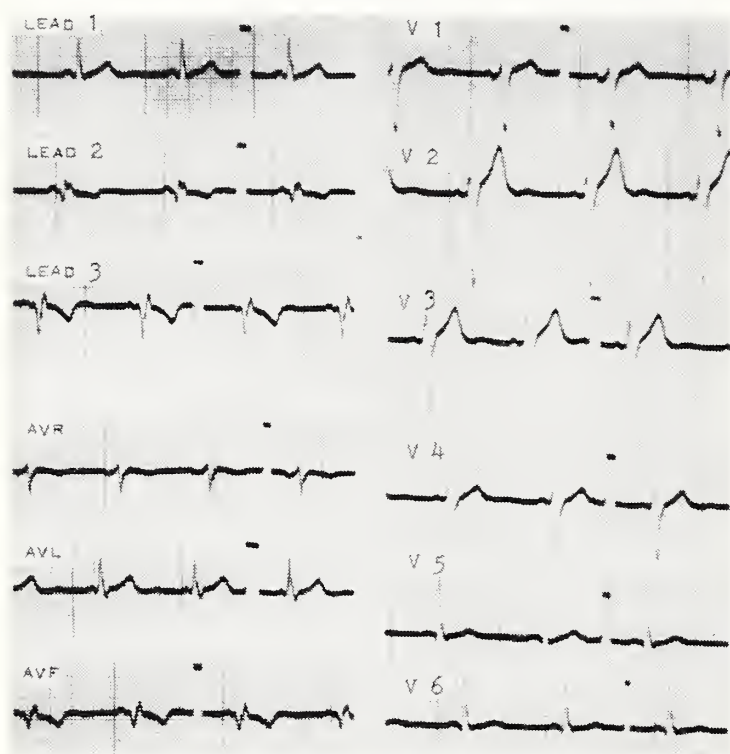


Figure 7

or 2, 3 and AVF. Therefore, this tracing is compatible with an old posterior wall myocardial infarction."

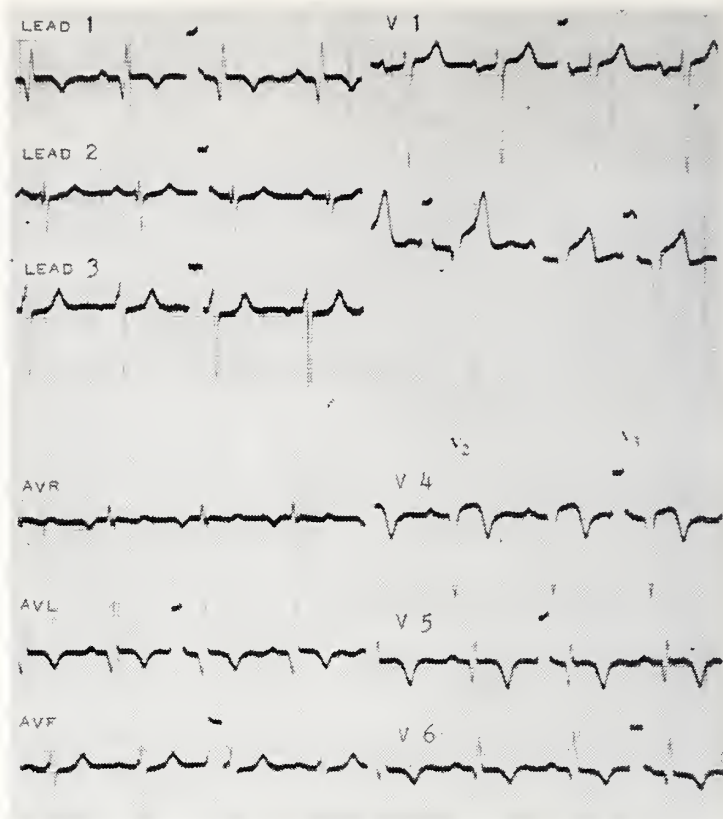


Figure 8

Dr. Rosenblatt: "The patient in Figure 8 is a 49-year-old male with chest pain three years ago of 24 hours' duration."

Dr. Walwyn: "There is a deep Q wave in lead 1, AVL; QS deflection in V2-V4. The ST segments are still elevated with persistent T wave inversion."

Dr. Rosenblatt: "As you stated, there is still ST segment elevation and T wave inversion, and the myocardial infarction took place three years ago. In other words, if you did not know that the individual had had the attack three years ago and were merely interpreting the ECG, you would suspect an acute anteroseptal myocardial infarction. However, with the history that we have we would suspect ventricular aneurysm." ★★★

1151 N. State St. (39201)

BOVINE BETTERMENT

When the legislative investigating committee was recently looking into the state's controversial Milk Commission and its price fixing authorities at the producer, processor, and retail levels, one capitol hill wag observed that it's all right for the cows to be contented, but Mississippi has made them hilarious.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1967, Atlantic City, N. J.; Clinical Convention, Nov. 26-29, 1967, Houston, Texas. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

American Academy of General Practice, Sept. 18-21, 1967, Dallas, Texas. Mr. Mac F. Cahal, Executive Director, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

American College of Surgeons, Annual Congress, Oct. 2-6, 1967, Chicago, Ill. John P. North, Director, 55 E. Erie St., Chicago, Ill. 60611.

Southern Medical Association, Nov. 13-16, 1967, Miami Beach, Fla. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

International College of Surgeons, North American Federation, 32nd Annual Meeting, April 30-May 4, 1967, Bal Harbour, Fla. Mr. Stanley Henwood, Executive Director, 1516 Lakeshore Dr., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi State Medical Association, May 15-18, 1967, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Annual Meeting, Oct. 17-19, 1967, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September, and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box L, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

Radiologic Seminar LIX: Vertebral Cupping in Sickle Cell Disease

J. V. FERGUSON, JR., M.D.
Greenwood, Mississippi

SICKLE CELL DISEASE is almost exclusively limited to the Negro race. It may be present in a homozygous form as in sickle cell anemia (SS); in a heterozygous carrier state (AS); in combination with normal adult hemoglobin such as C to cause (SC) disease. Its manifestations are so diffuse that no tissue or organ in the human body is spared from its involvement.

This paper deals with a deformity produced in the vertebral body and present in about 30 per cent of the adults with this blood dyscrasia. Characteristically the defect does not involve all of the end plate. It consists of a cup-like depression confined to the central zone of the end plate so that the periphery retains its normal flat surface. The deformity is also unique in that the "floor" of the central depression, instead of being rounded, is formed by a flat plate of dense bone. The contour of the vertebrae is so distinctive that it is virtually pathognomonic of the disease.

This lesion is to be differentiated from the "fish mouth" deformity or "fish vertebrae" sign produced by osteoporosis. In the latter condition the entire surface of the end plate is altered so that a rounded depression is formed which extends in a gently sweeping curve from the depth of the central indentation to the periphery of the vertebral body. There are other features which help to differentiate the vertebral lesion of sickle cell disease from the bi-concave deformity produced by other disorders. In the hemoglobinopathy the de-

pression in the upper and lower surfaces of the centrum are almost identical in shape and depth, whereas this symmetry is commonly absent in the deformity produced by the simple collapse of weakened bone. Also, sickle cell disease may involve contiguous segments while in osteoporosis it is rare for two deformed segments to appear identical.

The depth of the concavity in the surface of the centra in sickle cell disease is unrelated to both the magnitude of mechanical stress and the severity of the anemia.

The pathogenesis of the vertebral lesion in sickle cell disease is thought to be due to a developmental defect secondary to ischemia, the ischemia resulting from either the cumulative effects of repeated small episodes of intramedullary infarction or by the insidious effects of local low-grade chronic anoxia. Marrow hyperplasia with secondary osteoporosis as a cause can be excluded by the fact that vertebral collapse is not a feature of other hemolytic anemias. The centrum of the vertebra has two sources of blood supply. The central portion receives its blood supply from the nutrient artery while the periphery receives its supply from perforating arteries from the periosteum. Thus with infarction of a segment to the center, the periphery keeps growing letting the vertebra maintain its rectangular shape. Signs of this lesion are rarely observed before the age of 10 years and the changes cease once skeletal maturation is at an end.

A vertebral deformity is described that is virtually pathognomonic of sickle cell disease. It is

Sponsored by the Mississippi Radiologic Society.
From the Department of Radiology, Greenwood Leflore Hospital.



Figure 1. Typical deformity in thoracic vertebrae of 29-year-old Negro male. Particularly note T-10 which is a classical example of the described deformity.



Figure 2. Lumbar spine of same patient. Note the gallstones anterior to L-2 which are a frequent finding in this disease.

seen in about 30 per cent of the patients with this condition and consists of a cup-like depression confined to the central zone of the end plate so that the periphery retains its normal flat surface. The sign is rarely observed before the age of 10 years.

★★★

801 S. Blvd. (38930)

REFERENCES

1. Reynolds, Jack: A Re-evaluation of the "Fish Vertebra" Sign in Sickle Cell Hemoglobinopathy, Am. J.

Roentgenol. 97:693-706, 1966.

2. Barton, C. J., and Cockshott, W. P.: Bone Changes in Hemoglobin SC Disease, Am. J. Roentgenol. 88: 523-532, 1962.

3. Deibert, Kirk R.: Roentgen Changes in Sickle Cell Anemia, Am. J. Roentgenol. 82: 501-504, 1959.

4. Carroll, D. S.: Roentgen Manifestations of Sickle Cell Disease, South. M. J. 50: 1486-1490, 1957.

5. Cockshott, W. P.: Dactylitis and Growth Disorders, Brit. J. Radiol. 36:19-26, 1963.

6. Reynolds, J.: The Roentgenological Features of Sickle Cell Disease and Related Hemoglobinopathies, Springfield, Ill., Charles C Thomas, 1965.

HEADY STUFF

The Selective Service has made the decision to hold up on drafting any more karate experts. One recently inducted knocked himself senseless for two days when learning to salute.

The Mediatrix Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.

"A steroid-nutritional compound (Mediatrix) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging... This therapy resulted in improvement of 75 per cent of the patients..."

McNeill, A. J.: Clin. Med. 8:518 (Mar.) 1961.

"Mediatrix (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics 12:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

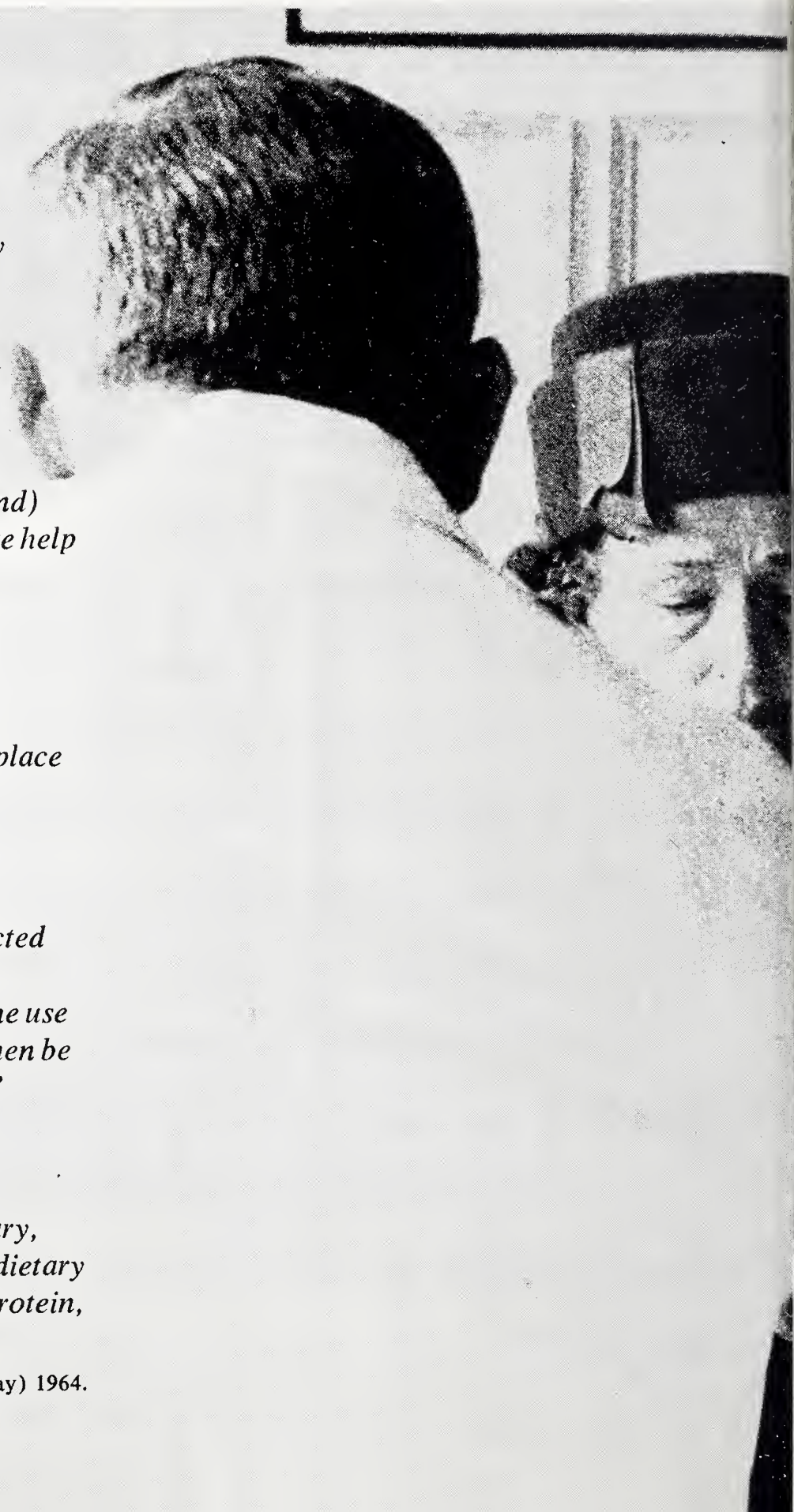
Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied... The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. 12:489 (May) 1964.





TABLETS

Equagesic[®]

(meprobamate and
ethoheptazine citrate with
aspirin)



Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psycho-neurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.
Wyeth Laboratories Philadelphia, Pa.

Weighing on his mind, too

When pain evokes anxiety and tension, thereby heightening patient discomfort, a simple analgesic may only touch on part of the problem.

This single-prescription, non-narcotic product, however, usually provides effective analgesia *and* helps put the patient's mind at ease.



The President Speaking

'Title XIX Meetings'

JAMES T. THOMPSON, M.D.

Moss Point, Mississippi

THE SERIES OF REGIONAL information meetings on Title XIX initiated by the state medical association in February offer a unique opportunity for the practicing physician to enter into the discussion of this new challenge before the profession and the state. Most members will find a regional meeting within a few minutes drive from their home communities.

The meeting series is one of the more ambitious information projects undertaken by the association. The issue is sufficiently important enough to justify and require this meeting series which will be conducted with considerable sacrifice on the part of many association leaders. Local societies, too, will be expending time and effort in carrying out their important roles as hosts and local sponsors.

This project was not lightly undertaken by the Board of Trustees, and each member has been the leader in organizing his respective district meeting. This is our opportunity to bring together a forum of physicians, legislators, hospital leaders, local government representatives, and our colleagues in dentistry for a reasoned discussion and consideration of the shape of the future for care of the needy.

Title XIX is a complicated law which few enough clearly understand. It is a duty of every practicing physician to inform himself of this law, its ramifications, and potential impact. The nation is committed to a Title XIX program, and it is medicine's responsibility to help find solutions to perplexing problems in assuring fully adequate medical care for all who need it. A successful meeting series will be a beginning step.

★★★



American Nursing Home Services: Profile of Crisis

I

A SERIOUS CRISIS in nursing home care exists in these United States today, and it will be much more crucial before the situation gets any better. If Medicare has aggravated and inflated the consequences of the shortage of nursing home beds, the crisis is headed for new proportions of gravity when Title XIX service minimums embrace this service on July 1. In a nutshell, government has become a bull in the marketplace of health services, buying futures which at the moment can't be delivered.

On January 1 when extended care benefits became available for 19 million citizens over age 65 under Title XVIII, the government was placed in a position of guaranteeing payment for 1.9 billion days of nursing home care. On July 1 when, under the Title XIX timetable, nursing home services must be assured for all needy citizens who are blind, disabled, or who qualify as those in families with dependent children, the commitment shall have been substantially extended.

But there are just under 600,000 nursing home beds in the United States, and less than a third are approved for Medicare. Reduced to bare bones reality, this means that there are 73 million days of nursing home care available against a commitment of 1.9 billion days. It also means that were the stringent standards nursing homes must meet relaxed tomorrow, there would still be only three beds per 100 citizens over age 65. Trim this fatal-

ly narrow margin by including those who will be eligible for Title XIX nursing home benefits, and there emerges a profile of crisis sharply defining a medical facilities problem of gargantuan proportion.

II

Less than 3,000 nursing homes with under 200,000 beds have fully qualified to participate in Part 1-A of Medicare. Of these, about 2,000 are in the skilled category and the rest are divided among hospital adjuncts, special custodial facilities offering skilled care, rehabilitation centers, and a few owned by state and local governments.

Eight out of 10 nursing homes in the United States are privately owned, proprietary institutions. Churches and other nonprofit organizations own 14 per cent of the facilities, and 7 per cent are owned by government.

On January 1, 1967, there were 13,685 nursing homes licensed in the nation with about 582,000 beds. Of these beds, 52 per cent have been built in the past five years. On the first of the year, an estimated 70,000 new beds in more than 1,000 new homes were under construction. The size of each new facility is bigger, too, because the mean number of beds in each project is about 65, against a mean of 40 beds per institution built in 1963 and 25 beds per unit in 1961. Obviously, this reflects the incentive introduced by Kerr-Mills in 1960 and Medicare in 1965.

The distribution of nursing home facilities, of-

ten an overlooked aspect of the crisis, poses serious concerns. An 11-state area ranging from Indiana to Florida and from the Virginias to the Mississippi River has less than 30 nursing home beds per 1,000 population aged 65 and over. Regional disparities are worse: Washington state, for example, has 65 beds per 1,000 seniors in contrast to North Carolina's 10 beds per 1,000, and these are equally prosperous and enlightened states. Only Colorado, Minnesota, New Hampshire, and Oklahoma can be grouped with Washington in boasting more than 50 beds per 1,000 over 65 citizens. The remainder of the states fall somewhere in between.

III

The demographic and medical profiles of nursing home patients compound the seriousness of the crisis. Only one out of eight is under age 65, but seven out of 10 are over age 75. Only a third of those admitted stay less than a year, and over half of the patients stay two to 10 years. It is a cold fact that most nursing home patients are admitted for life. This is especially underscored when the combined census shows that three out of 10 patients are over 85 years of age.

About 60 per cent of these patients are ambulatory, while a fourth never walk. Nearly a fifth have serious visual problems, and half are in mental confusion most or part of the time. One out of six has serious hearing impairment, and one out of four is incontinent. Nearly all have behavioral disability in some degree, usually superimposed over physical difficulties.

Two-thirds of all nursing home patients are women whose mean age is 79 years. Not only do women live longer but they also require more nursing care. For example, among each 1,000 Americans who are aged 85 and over, 175 are women in nursing homes in clearly defined contrast to only 106 men in the same decade of life.

IV

With Medicare's Title XVIII and the coming Title XIX, it is rhetorical to ask who will pay the bill—or most of it—for those in nursing homes. In fact, the pattern was already established while the Medicare debate raged. In 1963, about 53 per cent of all nursing home patients were receiving some sort of public assistance. In fiscal 1965, a year and a half before Medicare nursing home benefits were available, \$440 million was paid

in behalf of public assistance recipients in nursing homes.

And while vendor medical programs under the public assistance titles are in their dying days as the January 1, 1970, Title XIX deadline approaches, Mississippi is just now getting into the picture. The 1966 special session of the legislature appropriated \$200,000 for nursing home benefits to be matched 4-for-1 under vendor medical programs. More than likely, the chief expenditure of this \$1 million program will go for paying Part 1-A co-insurance costs of nursing home services for Old Age Assistance beneficiaries.

But the plentiful funds with which to purchase this care for the needy and for those under Medicare may mean little. To date, only a handful of homes in Mississippi have qualified as Medicare providers. What was once described in the editorial pages of the JOURNAL as the dimensions of a dilemma is now clearly a profile of crisis. The need for new facilities is undeniable, and the incentive is strong for investors. Let it be hoped that the private and local communities respond to the challenge, because the growing segment of the nation's aged will not and cannot be denied.—R.B.K.



Copyright 1967, Mississippi State Medical Association

"Relax, Mr. Jones. I just want to grease the wheels on the examination table."

now NovestrolTM (ethinyl estradiol U.S.P.)

estrogen replacement therapy

for the menopausal syndrome and female hypogonadism. Novestrol, a pure synthetic estrogen derivative, is related to estradiol which is the primary hormone of the ovarian follicle. It is effective orally and has all the actions of naturally occurring estrogen.

Ethinyl estradiol is the most active estrogen known. In addition to its high potency, Novestrol offers patients the advantages of minimal side effects, low cost, and convenience. Usually only a single daily dose is necessary.

Description: Each green, sugar-coated tablet contains 0.02 mg. of ethinyl estradiol U.S.P., a pure synthetic estrogen derivative, the most active estrogen known.

Indications: Menopausal syndrome and female hypogonadism.

Contraindications: Patients with tumors which estrogen might stimulate.

Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.



WILLIAM H. RORER, INC. Fort Washington, Pa.

The Monopoly-Maker

Sen. Philip A. Hart (D., Mich.) is a consistent soul, even if he must be judged a vindictive one, too. He is back in the 90th Congress with a new bill aimed solely at physicians, a much tougher and less compromising measure than the one he pushed unsuccessfully in the 89th Congress.

The senator is out to make it unlawful for a doctor of medicine to sell, either directly or indirectly, any drug or device or to own any interest in a pharmacy or optical dispensary. He makes a few grudging exceptions where the doctor may be the sole source of such necessary supplies and devices, but they are few and frugal.

In introducing the measure, Sen. Hart scattered the path to the hopper with a tirade of invective against what he calls the doctor-merchants who, from his viewpoint, have got to be the worst monopolists since Jay Gould and James Fisk lowered the boom on the gold market.

Since the last Hart bill died in the committee pigeon-hole, the senator has apparently shifted his emphasis from eyeglasses to drugs. During February hearings, a succession of retail pharmacy representatives paraded before his Subcommittee on Anti-Trust and Monopoly with virulent attacks on the medical profession. The real purpose, however, is poorly concealed, because he is after the ophthalmologist first and other medical disciplines afterwards.

That enactment of this class legislation would create a monopoly of astonishing proportion bothers the senator not one bit. He is strangely silent about the optometrists who dispense most of the eyeglasses purchased in the country each year. Similarly, he doesn't say that a dentist may not sell dentures.

At best—a circumstance which any reasonable person will find difficult to ascribe to this vindictive legislative proposal—the Hart bill is a crass endeavor to discriminate against and penalize highly trained professional people. At worst—and there can easily be debate over which section of the measure constitutes the greatest evil—the senator is out to formalize in federal law a proscription against a physician's discharging his full duty to his patient.

It is no secret that this bill, if enacted, could become the major bulwark in assuring a full monopoly for the optometrists' providing contact lenses. In state courts, optometrists are openly engaged in seeking injunctions against opticians'

fitting contact lenses. Fix up the law so a physician may not sell them, and the optometrists can slice up the pie at their leisure. In the meanwhile, we are apparently supposed to overlook the fact that about two out of five patients who want contact lenses could be permanently injured by being fitted with them.

The bill is S. 260 entitled the "Medical Restraint of Trade Act." Be sure to get the number correct when writing to your senator about it.—R.B.K.

Foibles, Fetish, and Fallacy Among the Pros

Almost nobody is immune from pet beliefs which usually clash head on with science and logic. A famous neurologist used to counsel multiple sclerosis patients to eat a sliver of cheese daily, although he simultaneously conceded that there was probably no value in doing so. The supermen of the gridiron, the pros of the National and American football leagues, no less than anyone else, have their foibles and fetishes, too.

Dr. James A. Nicholas, orthopaedic surgeon for the New York Jets, tells about a player who swallows half a jar of pure honey just before each game. By half-time, his stomach has had enough, and up comes the honey, but the ritual is repeated on the following Sunday. The player is convinced that he has the key to supercharging himself with energy.

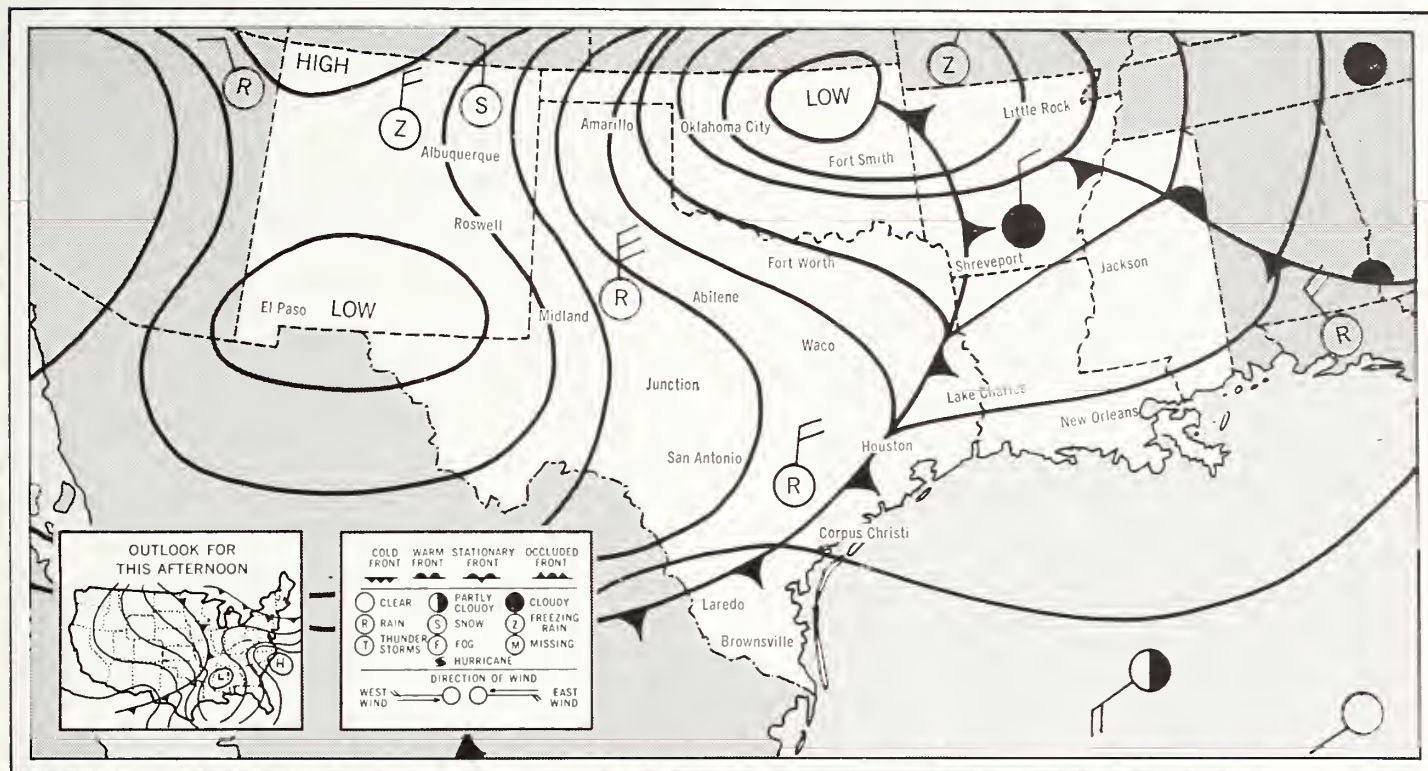
Still another pro gorges himself with three steaks on game day. He has it figured that protein makes a man stronger. Others follow exercise routines which not only are useless but actually damaging.

Dr. Nicholas says that these peculiar attitudes, unfounded assumptions, and superstitions crop up in athletes, sometimes arising out of a player's allegiance to a father, coach, or trainer who passes on something he was taught 20 years previously.

The Jets organization has to urge its team members to swim. Despite almost universal agreement that swimming is about the best way to stretch tight muscles, many of the athletes still believe that the exercise makes a man soft and flabby. Dr. Nicholas seems to wince when he tells of "seeing cartilages torn in front of my eyes" by athletes doing improper calisthenics. One star performer damaged a cruciate ligament doing pivoting toe touches. Dr. Nicholas says that these accidents happen through the misconception that everybody benefits from any type of exercise.

REGIONAL WEATHER FORECAST

Heavy Rains, Local Flooding, Sleet and Snow Followed by Cough, Stuffed and Runny Noses and Aches and Pains.



Tussagesic breaks up coughs, quickly clears stuffed and runny noses and relieves aches and pains. Provide coverage of the tough cold for up to 24 hours with just a single timed-release tablet dosed morning, midafternoon and at bedtime.

each

Tussagesic®

timed-release tablet contains:

Triaminic®	50 mg.
(phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. **Side effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES • a division of The Wander Company • LINCOLN, NEBRASKA

Still another idiosyncrasy is taping. Dr. Nicholas said that taping Joe Namath's ankles "would be the worst thing in the world," because the passing champ has had a cruciate ligament removed. He explained that landing on a rigidly taped ankle transmits the force directly to the knee.

Ergogenic aids are the stock in trade of another high performance cult in the pro fraternity. Inhalation of oxygen doesn't help a tired player, Dr. Nicholas said, but since it is harmless, the Jets provide it for those who believe in it. Similarly, vitamins, folic acid, and "blood builders" are useless to an athlete who eats at a good training table. Some team physicians even make available placebos to players who insist that they must have amphetamines to reach a performance peak.

All of this is more than a recitation of pet beliefs among top athletes; it is also a strong case for close and continuing medical supervision of organized team sport in the interest of the players coming back to compete another day.—R.B.K.

Tax Automation

People nowadays tell more jokes about computers than about members of Congress, but the cold facts of the matter are that these electronic marvels are about the most valuable tool at the disposal of civilized society since the wheel. Comes now the Internal Revenue Service demonstrating the value of the think machines.

For 1966 federal income tax returns, every entry will be subjected to scrutiny by the IRS computers. For 1965 filings, only the arithmetic was so checked, but it paid off handsomely. The machines discovered errors which netted Uncle Sam some \$19 million more in tax dollars. Moreover, IRS says that the computers have "frightened" taxpayers into new and higher levels of honesty with about \$6 million in previously unreported taxes coming in voluntarily.

Last year, the electronic brains turned up more than 9,000 tax delinquents as to returns for whom \$2.6 million had already been paid through withholding taxes. But they benefit the honest citizen, too, because it was discovered that \$400,000 was due taxpayers who had been too generous with the government.

In 1966, the IRS took in \$128.9 billion from 104 million returns, and the take will be even better this year. We can find great satisfaction in knowing that the transistorized Big Brothers are

watching the slickers, if we can just overcome the apprehension that they are watching us, too.—R.B.K.



WILFRED Q. COLE, ELLIS M. MOFFITT, and GEORGE W. OWEN of Jackson have announced the formation of the Mississippi Allergy Clinic and the association of R. FASER TRIPLETT. The group is now located at 940 North State St.

BEN L. CRAWFORD, JR., was installed as president of the Walthall County Chamber of Commerce during the 10th annual membership banquet at Tylertown. WALTER W. CRAWFORD, brother of the president, was installed as a member of the chamber's board of directors.

JOHN P. ELLIOTT, JR., of Tupelo has announced the removal of his office to 605 Garfield Ave. from his former location in the Professional Building.

RICHARD T. FURR of Ocean Springs has occupied his new clinic building at 1800 Government St. The facility is designed to accommodate two physicians and has seven examination and treatment rooms and two consultation rooms in addition to x-ray, emergency, and laboratory facilities.



Copyright 1967, Mississippi State Medical Association

"And just how long have you been putting chocolate syrup on your shrimp cocktails?"

Estomul does what standard anticholinergics fail to do—it provides a continuous climate for ulcer healing, eliminating the peaks and valleys of ordinary therapy. It is a comprehensive formulation providing sustained antisecretory effect on gastric activity. A recent study¹ reported a 56% satisfactory response with a maintenance schedule of Estomul in patients refractory to all previous medication. In less difficult peptic ulcer patients, a second study² noted a 94% satisfactory response. Both studies confirmed this clinical improvement radiologically. And both reported unusually prolonged reduction of basal secretion. With a maintenance course of Estomul therapy you can provide this continuous climate for healing in your own peptic ulcer patients.

A continuous climate for ulcer healing

(not simply episodic reduction of secretion or motility)

Estomul[®]

Tablets

Each swallow tablet contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 25 mg.; magnesium oxide, 45 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 500 mg.

Good-Tasting Liquid

Each tablespoon (15 cc.) contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 50 mg.; aluminum hydroxide—magnesium carbonate (as co-precipitate), 918 mg.

Dosage: 1 or 2 tablets or 1 or 2 tablespoons 3 times daily.

Supplied: In bottles of 100 tablets or 12 fluid oz..

Side Effects: Doses in excess of 6 tablets or 6 tablespoons daily may produce dryness of mouth or blurring of vision. Other possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Contraindicated: In glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia and myasthenia gravis.

References: 1. McHardy, G. G., Judice, R. C., McHardy, R. J., and Cradic, H.: Southern Med. J. 59:459 (April) 1966. 2. Slanger, A.: Western Med. 6:205, 1965.



Riker Laboratories • Northridge, California 91324



PERSONALS / Continued

PAUL D. GARD, JR., has become affiliated with the Vicksburg Clinic and Vicksburg Hospital where he will limit his practice to pathology.

JAMES O. GILMORE of Oxford has announced the removal of his offices to 2169 South Lamar Blvd.

JOHN E. HARRIS has entered office as 1967-68 president of the Okolona Chamber of Commerce. He succeeds JOSEPH H. SHOEMAKER who served as 1966-67 president. Both physicians are engaged in private practice in Okolona.

BILLY B. HOOVER of Olive Branch has been awarded a fellowship in graduate study by the Vocational Rehabilitation Administration. On Feb. 1, he entered training in physical medicine and rehabilitation at Parkland Memorial Hospital at Dallas where the program is under the Baylor University Medical Center and the University of Texas Southwestern Medical School.

EARL L. LAIRD of Union has been elected chairman of the board of directors of the Peoples Bank. He heads the Laird Hospital and Clinic at Union.

JOHN D. MCEACHIN of Meridian has been nominated for the annual Jaycee Distinguished Service Award for 1966 in the Meridian Junior Chamber of Commerce. He is engaged in the practice of pediatrics and is active in community and civic affairs.

JAMES R. RUSSELL has returned from military service to establish his practice at Houston. A native of that city, Dr. Russell is a graduate of Mississippi State University and the University of Mississippi School of Medicine.

JAMES H. SAMS has located in Hollandale where the community has been without a physician for a year. The native of Columbus received his pre-medical training at Ole Miss and his medical training at the University of Mississippi School of Medicine.

W. K. STEWART has become associated with the Byrne-Barkley Clinic at Pass Christian where he will be engaged in general practice. Other members of the group are JARE L. BARKLEY and GEORGE W. BYRNE.

EDWIN B. WERKHEISER of Jackson has become the first physician to qualify for membership as a Patron of Excellence in support of the Mississippi State University Development Foundation. There are now 110 patrons, and the foundation has as its goal the enrollment of 200 patrons by 1973.

WILLIAM B. WHITE of Laurel has announced the removal of his offices to 1007 Jefferson St. from his former location in the Medical Arts Building.



NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

MOORE, JOHN WILSON, Laurel. Born Newton, Miss., June 23, 1932; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned Touro Infirmary, New Orleans, La., one year; surgery residency, Touro Infirmary, New Orleans, La., three years; surgical preceptorship, V. A. Hospital, Alexandria, La., two years; fellow, American College of Surgeons; diplomate of the American Board of Surgery; elected Sept. 8, 1966, by South Mississippi Medical Society.

SPENCER, GILBERT ORION, JR., Columbus. Born Huntsville, Ala., Aug. 21, 1935; M.D., Medical College of Alabama, Birmingham, 1959; interned University Hospital, Birmingham, Ala., one year; general surgery residency, University Hospital, Birmingham, Ala.; captain, U. S. Army; elected Dec. 15, 1966, by Prairie Medical Society.

WALKER, GENE TALMADGE, Vicksburg. Born Vicksburg, Miss., Oct. 30, 1933; M.D., University of Tennessee College of Medicine, Memphis, 1957; interned John Gaston Hospital, Memphis, Tenn., one year; ob-gyn residency, John Gaston Hospital, Memphis, Tenn., three years; elected Oct. 11, 1966, by West Mississippi Medical Society.



DEATHS

PERCY, GEORGE LEON, Costa Mesa, Calif. M.D., University of Illinois College of Medicine, Chicago, 1926; interned St. Mary of Nazareth Hospital, Chicago, Illinois, one year; Emeritus member of MSMA; died Jan. 17, 1966, aged 73.



POSTGRADUATE CALENDAR

FIRST PEDIATRIC SEMINAR

University Medical Center, Jackson
March 9, 1967, beginning at 9:00 a.m.

THE PERCEPTUALLY HANDICAPPED CHILD
Margaret B. Batson, M.D.

PSYCHOLOGICAL TESTING (TV TAPE)
Mary Martha Murphy, Ph.D.

PERCEPTUAL HANDICAP
Mrs. Lalla S. Paschal

BEHAVIOR MODIFICATION (TV TAPE)
Mrs. Helen Wilroy

Discussion Period

Recess for Lunch

MIST THERAPY IN PULMONARY DISEASE
Wilfred Q. Cole, M.D.

URINARY TRACT INFECTIONS IN INFANTS AND
CHILDREN
J. M. Montalvo, M.D.

BATTERED CHILD SYNDROME
Blair E. Batson, M.D., Judge Carl Guernsey,
Lee Earl Hill, ACSW

Discussion Period

14TH ANNUAL CARDIOVASCULAR SEMINAR

University Medical Center, Jackson
March 29, 30, 31, 1967, beginning at 9:00 a.m.
Sponsored by UMC and the Mississippi Heart
Association

Participants

S. Gilbert Blount, M.D., Professor of Medicine,
University of Colorado Medical Center, Denver

W. B. Kannel, M.D., Medical Director, Heart
Disease Epidemiology Study, Framingham,
Mass.

John W. Kirklin, M.D., Professor of Surgery and
Chairman of the Department, University of
Alabama Medical Center, Birmingham

Eugene Klatte, M.D., Professor of Radiology and
Chairman of the Department, Vanderbilt Uni-
versity School of Medicine, Nashville

Richard Rowe, M.B., Professor of Pediatrics,
Johns Hopkins University School of Medicine,
Baltimore

Demetrio Sodi-Pallares, M.D., Chief, Department
of Electrocardiography, National Institute of
Cardiology, Mexico City

Wednesday, March 29

ROENTGEN CLUES IN THE PLAIN FILM DIAGNOSIS
OF CONGENITAL HEART DISEASE
Dr. Klatte

CARDIOVASCULAR DISEASE RESULTING FROM MA-
TERNAL RUBELLA
Dr. Rowe

SURGICAL TREATMENT OF TETRALOGY OF FALLOT
Dr. Kirklin

Pediatric Grand Rounds

Recess for Lunch

DIFFERENTIAL DIAGNOSIS OF OBSTRUCTION TO
OUTFLOW FROM LEFT VENTRICLE
Dr. Blount

OBSTRUCTION OF AIRWAYS CAUSING HEART DIS-
EASE IN CHILDREN
Dr. Rowe

Thursday, March 30

DIAGNOSTIC CONSIDERATIONS IN NEWBORN IN-
FANTS WITH CONGENITAL HEART MALFORMA-
TION
Dr. Rowe

TECHNIQUES AND RESULTS OF SURGERY FOR
AORTIC VALVE DISEASE
Dr. Kirklin

Recess for Coffee

EXTRACARDIAC ANGIOGRAPHY—ITS PLACE IN
MODERN MEDICINE
Dr. Klatte

Surgery Grand Rounds

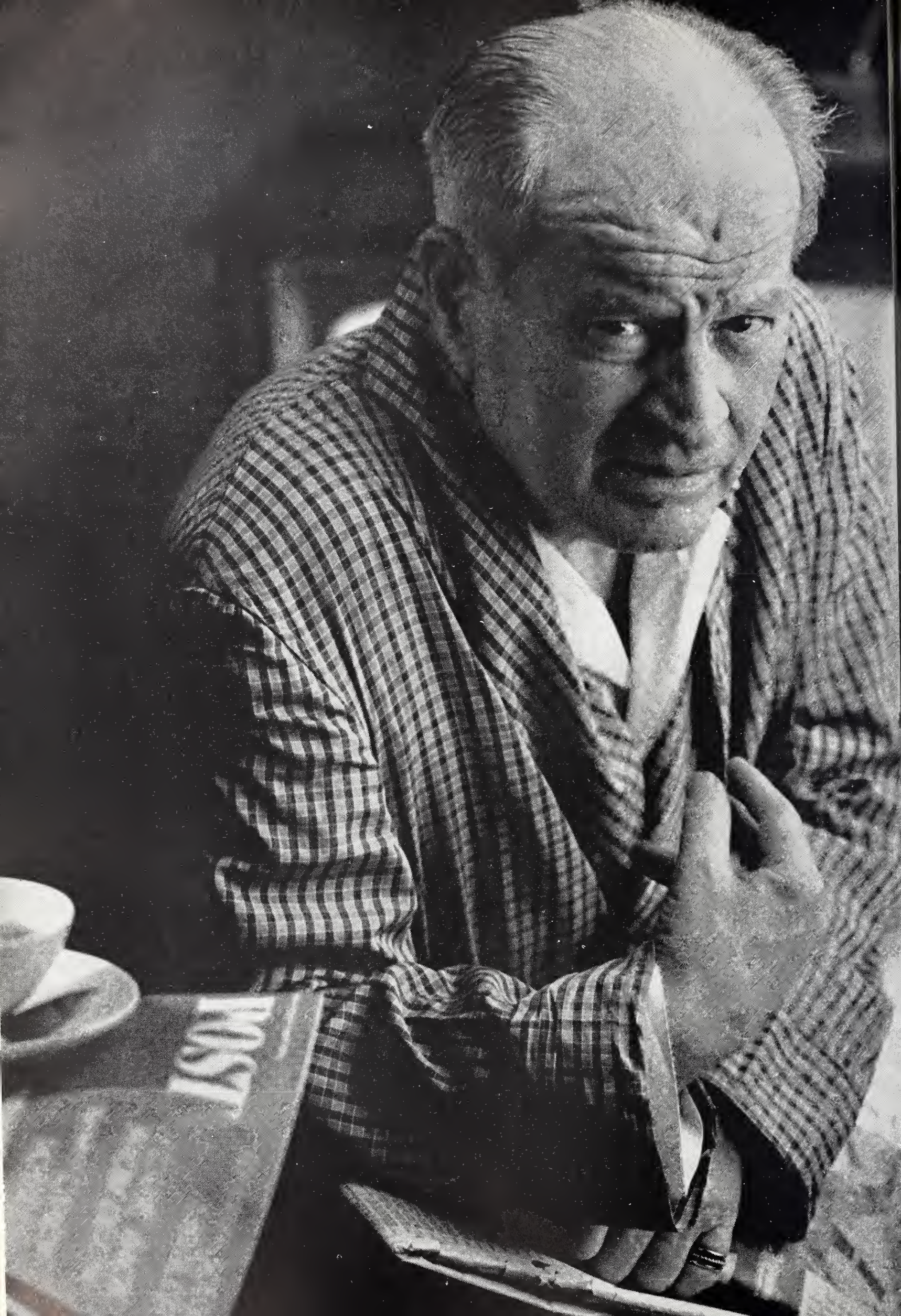
Recess for Lunch

DIFFERENT DEGREES OF CORONARY INSUFFICIEN-
CY
Dr. Sodi-Pallares

THE HEART AND HYPERTHYROIDISM
Dr. Blount

Friday, March 31

THE POLARIZING TREATMENT OF DIFFERENT
CARDIAC CONDITIONS
Dr. Sodi-Pallares



I'm supposed to get up and do things?

With my heart?

It's entirely natural—and may even be desirable—for the cardiovascular patient to be somewhat anxious about himself.

But when anxiety leads to unreasonable self-imposed limitations and restrictions . . . when it aggravates cardiovascular symptoms . . . when it interferes with restful sleep, measures to help alleviate the anxiety are probably in order.

One measure, of course, is reassurance. Another, adjunctive measure, is EQUANIL (meprobamate).

Over a decade of experience has shown that EQUANIL (meprobamate) is generally well tolerated as well as effective. Side effects are usually limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose

should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

American Hospital Formulary Service Category No. 28:16.08

A quality controlled product of Wyeth Laboratories Philadelphia, Pa.

to help relieve anxiety and tension occurring
alone or secondary to organic disease

Equanil[®]
(meprobamate)



PRIMARY MYOCARDIAL DISEASE
Dr. Blount

Recess for Coffee

THE RADIOGRAPHIC DIAGNOSIS OF COMMON AND
UNCOMMON ACQUIRED HEART DISEASE
Dr. Klatte

Medicine Grand Rounds

CENTER ASSEMBLY—EPIDEMIOLOGY OF CORO-
NARY ARTERY DISEASE
Dr. Kannel

ELECTROCARDIOGRAPHIC RECOGNITION OF THE
INJURY TISSUE IN MYOCARDIAL INFARCTION
Dr. Sodi-Pallares

CARDIAC PERFORMANCE AFTER OPEN INTRA-
CARDIAC OPERATIONS
Dr. Kirklin

CIRCUIT COURSES

COMBINATION CIRCUIT
Natchez—April 18
Columbus—Feb. 28, April 25

EAST CENTRAL CIRCUIT
Meridian—March 7, April 4, May 9

FUTURE CALENDAR

March 9

FIRST PEDIATRIC SEMINAR

March 27-29

POISON CONTROL CONFERENCE

March 29-31

CARDIOVASCULAR SEMINAR

April 13

CONTROL OF DIABETES AND HYPERTENSION

April 20

MISSISSIPPI THORACIC SOCIETY

May 15-18

99TH ANNUAL SESSION, MSMA

September 22

CURRENT PRACTICES IN THE MANAGEMENT
OF BILIARY TRACT PROBLEMS

ARTHRITIS SEMINAR

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRAC-
TICE

November 10

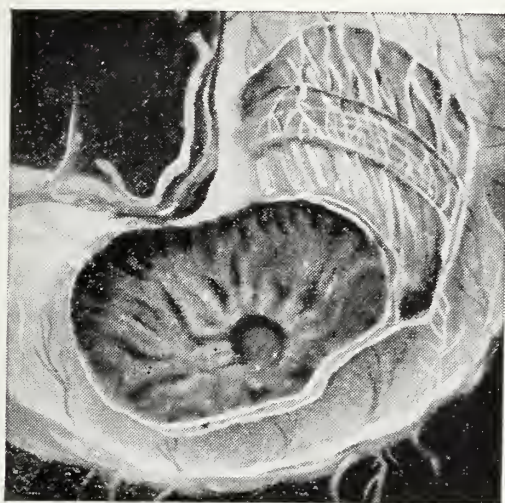
HAND INJURIES

State Morbidity Reported
Through Jan. 20

The Mississippi State Board of Health reports the following occurrence of morbidity for 1967 through the 3rd week of the year, ending Jan. 20. Case totals are shown opposite the disease condition.

Tuberculosis, pul.	41
Tuberculosis, O. F.	4
Salmonella infections	4
Hepatitis, inf.	17
Dysentery, bac.	3
Helminthic infections	
Hookworm	47
Ascariasis	19
Strongyloides	1
Meningitis, men.	2
Mumps	33
Measles	139
Chickenpox	26
Strep infections	
Strep throat	97
Scarlet fever	7
Syphilis	
Early	20
Late	5
Gonorrhea	355
Rabies in animals	
Bats	1

In peptic ulcer... antacid therapy with a new benefit



CONTAINS A BALANCED
COMBINATION
OF THE MOST WIDELY
USED ANTACIDS—
FOR RAPID
NEUTRALIZATION.
PLUS SIMETHICONE—
TO CONTROL
THE FACTOR WHICH
ANTACIDS ALONE
CANNOT INFLUENCE.

Mylanta[®]

- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
- The nonfatiguing flavor and smooth, nongritty consistency of tablets and liquid encourage continued patient cooperation during long-term therapy.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.

Stuart

Rise in Bootleg Drugs Is Seen

Prohibition-style racketeers, scenting millions of dollars in bootleg drugs, are beginning to invade the prescription drug market under cover of pressure for lower prices, Lyman C. Duncan, chairman of the Pharmaceutical Manufacturers Association, said.

A rising tide of "bootleg drugs" could impose a task on Food and Drug Administration agents as difficult as that of revenue agents searching for bootleg stills in prohibition days, Duncan warned at the annual meeting of the National Association of Retail Druggists.

He said the protection once afforded doctors and their patients by the manufacturer's name on his products was "in danger of being demolished" by governmental action to promote the use of unbranded, and presumably cheaper, drugs.

In the past, Duncan said, the chief requirement of an FDA inspector was technical knowledge of pharmaceutical products and manufacturing proc-

esses. The reliance on manufacturer's integrity "made it possible to police this vast industry successfully with a mere handful of technically-oriented FDA inspectors."

Now, with FDA's assignment of policing the potency, purity and safety of drugs, and the advent of "bootleggers," Duncan went on, the agency will require "pistol-packing investigators skilled in underworld procedures." He said they will have to search for the illicit and shady operators turning out complex and dangerous drugs in the industrial fringes of New Jersey and the outskirts of major cities such as Chicago and Detroit.

He said that many of the best known and most effective drugs in use today—steroids, antibiotics, diuretics and others—were the object of smugglers, counterfeiters and "all the illicit makers and purveyors of drugs of unknown and unspecified origin."

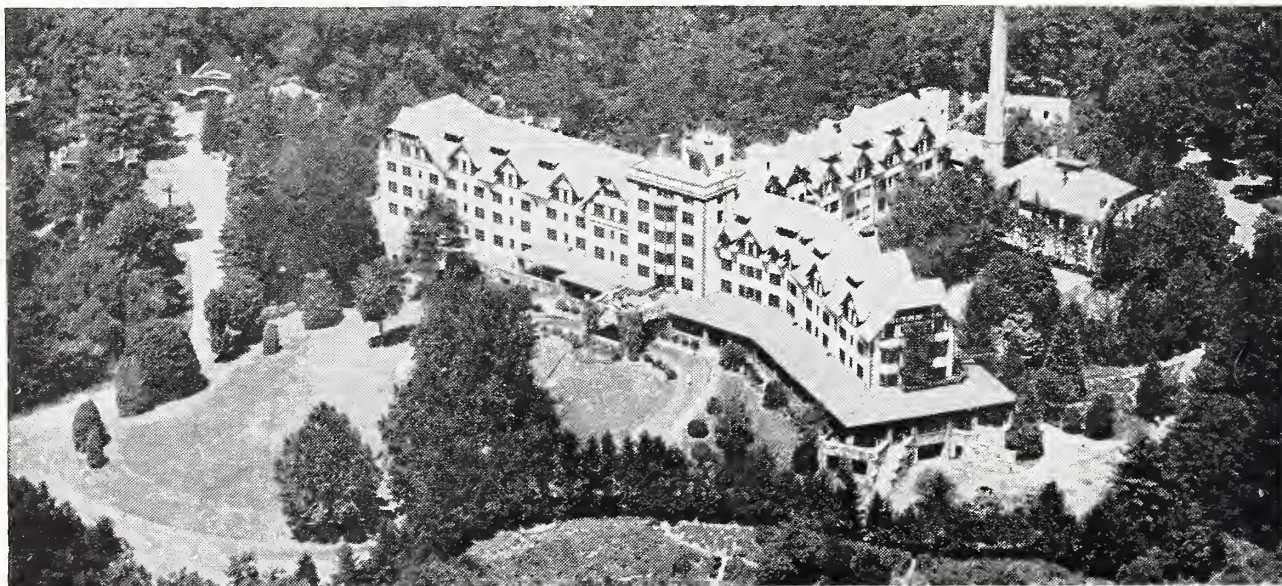
He recalled that the Lederle Laboratories division of his own company, American Cyanamid, of which he is vice president for medical affairs, was the victim of thieves who sold stolen cultures and materials to Italian drug companies. These companies in turn sold drugs made from the stolen materials back to the United States Government.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.



Book Reviews

Hematologic Problems in the Newborn. By Frank A. Oski, M.D., Assistant Professor of Pediatrics, University of Pennsylvania, and J. Lawrence Naiman, M.D., Assistant Professor of Pediatrics, Temple University. 294 pages with illustrations. Philadelphia: W. B. Saunders Company, 1966. \$11.00.

This book is Volume IV in the series, *Major Problems In Clinical Pediatrics*. The purpose is to provide in a "single source much of what is known concerning both the normal and abnormal hematologic processes of the first month of life and the effects of prenatal factors on them."

There are nine chapters and they include 55 tables, 47 figures, and a 36-page bibliography. Each table is a summary of the detailed text and makes the information easy to refer to. I believe the bibliography is the most complete anywhere on these subjects.

Chapter One gives an excellent discussion on hematopoieses in utero. The hematologic picture at birth then follows. The effect of cord clamping and hemoglobin concentration, fetal-maternal and maternal-fetal transfusions and the normal blood values are all illustrated.

Chapter Two covers the effects of maternal malnutrition, illness, infection, and drug ingestion. The section on congenital Rubella was most interesting.

Chapter Three reviews the types of anemia and the three causes; hemorrhage, hemolysis, and failure of red cell production.

Chapter Four presents the enzymatic deficiencies of the red cell, abnormalities of red cell morphology and the effects of drugs and toxins.

Chapter Five gives an outline of adult and fetal hemoglobin metabolism. Hemoglobinopathies are presented in detail. Methemoglobinemia and sulfhemoglobinemia are discussed.

Chapter Six—Erythroblastosis Fetalis, and Chapter Seven—Blood Coagulation And Its Dis-

orders are the two most practical and interesting to the practicing physician. The material on intra-uterine intraperitoneal transfusions was most welcome as was the information on anti-D gamma globulin to prevent Rh hemolytic disease. Table 40 and figure 37 were most helpful in understanding the blood clotting factors and the steps in the coagulation process. Hemorrhagic disease of the newborn and the approach to the problem of the bleeding infant was well done.

Chapter Eight—Thrombocytopenia, and Chapter Nine—Disorders Of Leukocytes are very complete in text and tables.

Like the others in this series, this book will serve as an excellent reference. Every physician who takes care of the newborn should have it available.

JOSEPH B. MILLER, JR., M.D.

A Manual of Tropical Medicine. By George W. Hunter, III, Ph.D., Col. U.S.A. (Ret.), Lecturer, Microbiology and Biological Sciences, College of Medicine, University of Florida; William W. Frye, Ph.D., M.D., Sc.D. (Hon.), Professor of Tropical Medicine, Director of LSU International Research and Training Programs in Tropical Medicine, Louisiana State University School of Medicine; and J. Clyde Swartzwelder, Ph.D., Professor of Medical Parasitology and Head of the Department of Tropical Medicine and Medical Parasitology, Louisiana State University School of Medicine. 931 pages with 323 illustrations. Philadelphia: W. B. Saunders, 1966. \$18.50.

The First Edition of this book was published in 1945 as one of a series of military medical manuals sponsored by the National Research Council. The original authors were Drs. Thomas T. Mackie, George W. Hunter, III, and C. Brooke Worth and the manual was designed especially for military medical officers.

With each succeeding edition, the scope of the book has been broadened and the material has

been updated. It is no longer a "Military Manual" but an extensive reference work dealing with tropical medicine in its broadest sense. In addition to the three authors, some thirty-seven contributors are listed. They represent, almost without exception, the most outstanding authorities in their respective fields. The major sections of the book deal with diseases caused by viruses, rickettsiae, spirochetes, bacteria, fungi, protozoa, and helminths. There are additional sections on nutritional diseases, miscellaneous diseases, the medically important mollusks, and arthropods. The final section deals with laboratory diagnostic methods.

It is always difficult for the author of a book on tropical medicine to decide what diseases are, in fact, "tropical." Some, that have worldwide distribution, are simply more prevalent or more severe in the tropics, while others occur only in the hot climates. This book includes diseases that many readers may not think of as being tropical as, for example, the Cocksackie virus infections, the Echo virus infections, rabies, the nutritional diseases, etc. They have obviously been included for the sake of completeness and because they often present special problems in the tropics.

The book is easy to read, well organized and well edited. As almost always happens there are a few typographical errors, but these are of a minor nature.

There are 323 illustrations, of which eight are in color. For the most part, they are exceptionally good. Some diseases are not pictured, but a good balance of the illustrative material has been maintained. The treatments described are complete and up to date.

The new appendix prepared by Dr. Gelman, giving the distribution of selected communicable diseases in the tropical and sub-tropical areas of the world is a welcome addition to the book. The organization of this section is on a geographic basis, so that a person journeying to any part of the world may see at a glance the important diseases to be encountered in that location along with brief epidemiologic discussions of most of them.

This is without doubt the best book available on tropical diseases at the present time. It is highly recommended for students of tropical medicine and for doctors who encounter infectious, parasitic, and nutritional diseases in their practice.

THOMAS J. BROOKS, JR., M.D.

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

*The
fast-disintegrating
uncoated tablet
gives relief in
15 minutes*

Each tablet contains:

Potassium Iodide 195 mg.
Aminophylline 130 mg.
Phenobarbital, Caution: May be habit forming . . . 21 mg.
Ephedrine HCl 16 mg.

FEDERAL LAW PROHIBITS

DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



The answer may be yes... if they're not on Hygroton. For instance, a therapeutic dose of a short-acting diuretic may cost 3 times as much as an equivalent dose of Hygroton. With Hygroton, in fact, you can usually do the job with just one tablet a day or one every other day. It's no wonder that the trend has been away from short-acting, multiple-dose, high-cost diuretics.

You may hear that a short-acting diuretic was more effective in a 400 mg. (ten-tablet) dose than Hygroton in a 200 mg. (two-tablet) dose.

If one considers maximum recommended doses for each product, tablet for tablet Hygroton was clearly superior. Two tablets of Hygroton were found to produce almost 40% more natruresis and 20% more weight loss than five tablets of the other diuretic.* Note that these are maximum recommended doses!

For effectiveness, economy, and convenience, therefore, Hygroton is the diuretic to choose to start with and the one to stay with.

*Brest, A. N., et al.: J. New Drugs 5:329, 1965.



Natruresis above control values after maximum recommended doses (mEq./24 hours) in "normal" patients

111
5 tablets short-acting
nonthiazide diuretic

152
2 tablets
Hygroton

48-hour weight loss after maximum recommended doses in edematous patients with congestive heart failure due to arteriosclerotic or rheumatic heart disease

1.84 lbs.
5 tablets short-acting
nonthiazide diuretic

2.2 lbs.
2 tablets
Hygroton

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.

Precautions: Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH,

or digitalis. Salt restriction is not recommended.

Side Effects: Dizziness, weakness, nausea, vomiting, hyperglycemia, hyperuricemia, headache, muscle cramps, postural hypotension, constipation, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin reactions, including urticaria and purpura, epigastric pain, or G.I. symptoms after prolonged administration.

Average Dosage: One tablet (100 mg.) with breakfast daily or every other day.

Availability: Tablets of 100 mg. in bottles of 100 and 1000. For full details, see the complete prescribing information. 6524-V(B)

HY-4736S

Hygroton®
chlorthalidone

Geigy

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York



Ole Miss Sets Poison Control Conference

A Conference on Poison Control, featuring top flight speakers, will be conducted by the University of Mississippi School of Pharmacy on the Oxford campus March 27-29. Planned to bring recent and comprehensive information on control, prevention, and treatment to physicians, pharmacists, nurses, and others professionally involved in poison control, the three day meet is financed by a U. S. Public Health Service Grant.

Dr. Harry A. Smith, who is project director for the conference, said that the program was developed with assistance from a number of state organizations. Among these are the Mississippi State Medical Association, Mississippi State Board of Health, Mississippi Hospital Association, Mississippi Nurses Association, Mississippi State University Extension Service, Mississippi State Pharmaceutical Association, USPHS, and the American Association of Poison Control Centers.

Seven physicians, a pharmacologist, toxicologists, a pharmacognosist, and an entomologist will appear on the program. Dean Charles W. Hartman of the Ole Miss School of Pharmacy will be among conference leaders.

The status of poison control, industrial, medical, and pharmacological poisoning accidents, toxic substances, bites and stings, household agents, toxicology centers, and poison control centers are among programmed discussion topics.

Dinner sessions will be enjoyed by conferees March 27 and 28 in the Paul B. Johnson Commons, as will luncheons each day. To assist those who will participate as postgraduate students, 50 tuition grants of \$70 each will be awarded, and 40 stipends of \$36 each will be made available for maintenance for out-of-town registrants.

Applicants must be U. S. citizens possessing a degree and licensure in the health services field. All persons interested in poison control are eligible to attend, but participants not receiving grants must pay a proportionate share of costs as a tuition fee. Official observers from professional organizations will not be charged. Application forms may be obtained from the Ole Miss School of Pharmacy, Dr. Smith said.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 595-1151

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA



Title XIX Regional Information Meets Are Scheduled by Board of Trustees

A statewide series of eight regional information meetings on Title XIX of Public Law 89-97 has been authorized by the Board of Trustees. The presentations were initiated in February and will extend into April, ranging in locality from Tupelo to the Mississippi Gulf Coast. This was the statement of Drs. James T. Thompson, association president, and John B. Howell, Jr., chairman of the Board.

The first two meetings were conducted in late February, Drs. Thompson and Howell said. The District 8 meeting at Natchez was held Feb. 21, and the District 7 meeting at Hattiesburg was conducted Feb. 23.

On the agenda at press time were scheduled meetings for Districts 1, 2, 3, 4, and 9. Districts 1 and 4 will combine in a joint meeting at Greenwood on March 23. The District 2 meeting will be conducted at Oxford on April 6, while the District 3 meeting is set for Tupelo on March 30. Coast physicians of District 9 will meet March 15.

Title XIX is a sweeping reorganization of medical care for the needy. It encompasses those who receive cash benefits under Old Age Assistance (Title I), Aid to Families with Dependent Children (Title IV), Aid to the Blind (Title X), and Aid to the Permanently and Totally Disabled (Title XIV).

The program can be made effective only after a state legislature has passed an implementation act and appropriated state funds. Federal matching funds are provided in amounts ranging from 50 to 83 per cent, and Mississippi qualifies for the maximum amount.

A second category of needy coming under a Title XIX program are those who, if sufficiently needy, would qualify for cash benefits under the four welfare titles. This would be, for example, an individual who is blind but who has resources barely sufficient for food, shelter, and clothing,

and who, at some time, may need help in meeting part or all of his medical expenses. This is an extension of the Kerr-Mills principle which was enacted for those over age 65.

A third group are those from the ages of 21 to 64 who would not otherwise qualify but who are

RIM's AT A GLANCE

Title XIX regional information meetings scheduled by association districts, showing local societies concerned, are:

March 15—District 9, Biloxi. Coast Counties Medical Society.

March 23—Districts 1 and 4, Greenwood. Delta and North Central District medical societies.

March 30—District 3, Tupelo. Northeast Mississippi and Prairie medical societies.

April 6—District 2, Oxford. North Mississippi and DeSoto County medical societies.

found needy in providing for medical care. All such groups are subjected to a means test.

The program is state-administered and would pay all sources of care, physicians, allied medical personnel, hospitals, and nursing homes. The first two aspects must be implemented by the states before Jan. 1, 1970, or they will suffer a loss of federal matching funds for health care purposes. The third aspect must be made effective by Jan. 1, 1975, under the same circumstances.

The regional information meetings will provide audiovisual presentation of the law and a summary of association studies on the program. Each will have two informational presentations

with color slides and a summary by a top association general officer.

Meeting arrangements are being coordinated by members of the Board of Trustees with component medical societies in their respective districts. The Board has been studying Title XIX for more than a year and developed the information meeting series during two Board meetings in 1966.

For the Natchez meeting, Dr. Walter T. Colbert, secretary of the Homochitto Valley Medical Society, served as local arrangements chairman. Dr. G. Swink Hicks, District 8 Trustee, was presiding officer.

At the Hattiesburg meeting, Dr. Gerald P. Gable served as arrangements chairman, and Dr. A. T. Tatum was presiding officer. The District 7 Trustee, Dr. W. E. Moak of Richton, arranged for an attendance chairman for each county in the district.

The Greenwood meeting is under the chairmanship of Dr. Howard A. Nelson with attendance chairmen for each society concerned. Drs. Lyne S. Gamble of Greenville, District 1 Trustee, and Mal S. Riddell, Jr., of Winona, District 4 Trustee, are coordinating the project.

Dr. C. D. Taylor, Jr., of Pass Christian, District 9 Trustee, is organizing the Coast meeting. Dr. Eldon L. Bolton of Biloxi will preside.

Dr. Thomas W. Wesson of Tupelo is chairman of the District 3 meeting which has been coordinated by Dr. J. T. Davis of Corinth, District 3 Trustee. Dr. Joseph B. Rogers of Oxford, District 2 Trustee, is organizing the April meeting for his district.

To broaden the information base both in the health care and local government communities, the Board has encouraged districts to invite dentists, legislators, members of boards of supervisors, hospital trustees, and hospital management personnel. With physicians and Auxiliary members, as many as 2,000 opinion leaders may be in attendance during the meeting series.

In addition to the audiovisual presentation at the meetings, the association is offering a new six-panel brochure, "Title XIX—Care for the Needy Explained by Your Doctor," which summarizes the law and scope of the program. It is available for general distribution in limited quantities and will be supplied without charge to local medical societies.

Drs. Thompson and Howell said that most of the regional information meetings will be conducted in March and April.

Physicians' Manual for 'Shield' Is Coming

Officials of the Mississippi Hospital and Medical Service said that a new physicians' manual is being produced by the Professional Affairs Division for distribution to every practicing member of the profession in the state. Dr. J. C. Woosley, president of the plan, said that a target date of March 1 has been set for delivery.

The manual is a vinyl-covered, loose-leaf binder containing helpful information on Blue Cross-Blue Shield for the active practitioner. A major section is devoted to description of basic and special coverages available to Mississippians through the Blue plan. Hints on completion of claims forms used in Blue Shield are included.

The announcement said that a complete listing of the most prevalent surgical schedules is in-



Blue plan officials examine an advance copy of the new physicians' manual for Mississippi practitioners. From the left are Dr. J. C. Woosley, president; Dr. Guy T. Gillespie, Jr., medical director; and William G. Shakelford, vice president.

cluded in detail. The manual is also aimed at helping the physician's medical assistant.

Plan officials emphasized that it is not necessary to order or otherwise request a copy of the manual, because distribution will be simultaneous and automatic.

Neonatal Respiration Is New Book Topic

Neonatal Respiratory Adaptation, a new book published by the National Institute of Child Health and Human Development, gives special emphasis to the problems faced in establishing adequate respiration in the newborn infant.

Devoted to discussions of what is known and not known about neonatal respiration, this book contains important information for physicians concerned with preventing respiratory failure in the newborn. Such respiratory failure in newborns is the largest single cause of death in the first month of life. Of the 100,000 American babies who die each year, 72,000 deaths occur between birth and one month of age. Nearly 30,000 of these deaths can be attributed to some form of respiratory distress.

Based on an NICHD-sponsored conference held during 1963 in Princeton, New Jersey, this book contains presentations and discussion by experts in such fields as physiology, biology, pediatrics, cardiology, obstetrics and gynecology on the subject of neonatal adaptation to extrauterine life. Containing 251 pages with over 130 tables, graphs and photographs, the book is fully indexed with references on each section updated to 1966. Dr. Thomas K. Oliver, Jr., Department of Pediatrics, University of Washington School of Medicine, Seattle, was Scientific Editor.

Neonatal Respiratory Adaptation contains presentations on: The effects of intrauterine events on the fetus; fetal circulation; the histochemistry of embryonic lungs; the transition from intrauterine to extrauterine life; neonatal pulmonary function; and circulatory adjustments after birth.

Some possible causes of respiratory distress of the newborn are also discussed in the book. For instance, there is a definite possibility that a particular substance may be lacking in the lungs which contributes to the collapse of all or part of the lung as noted in babies dying of hyaline membrane disease—the most serious form of respiratory distress. Other causes mentioned include premature birth with the subsequent possibility of immature lung development, and arteriolar vasoconstriction that can result in a lack of blood flow to the lungs.

Other questions relating to respiratory adaptation discussed in the book include the following: (1) Does respiratory distress have its origin *in utero* as a form of biochemical injury to the fetus? (2) When does the infant take his first and subsequent breaths? (3) How does oxygen lack,



What can be done for Susan Jane To stop the runs and crampy pain?

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects
intestinal mucosa.

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.



Parepectolin[®]

Each fluid ounce of creamy white suspension contains:
Paregoric (equivalent)..... (1.0 dram) 3.7 ml.
Contains opium ($\frac{1}{4}$ grain) 15 mg. per fluid
ounce.

warning: may be habit forming

Pectin (2½ grains) 162 mg.
Kaolin (specially purified).... (85 grains) 5.5 Gm.
(alcohol 0.69%)

Usual Children's Dose: One or two teaspoonfuls
three times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

Norinyl[®] tablets

(norethindrone 2 mg. \bar{c} mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

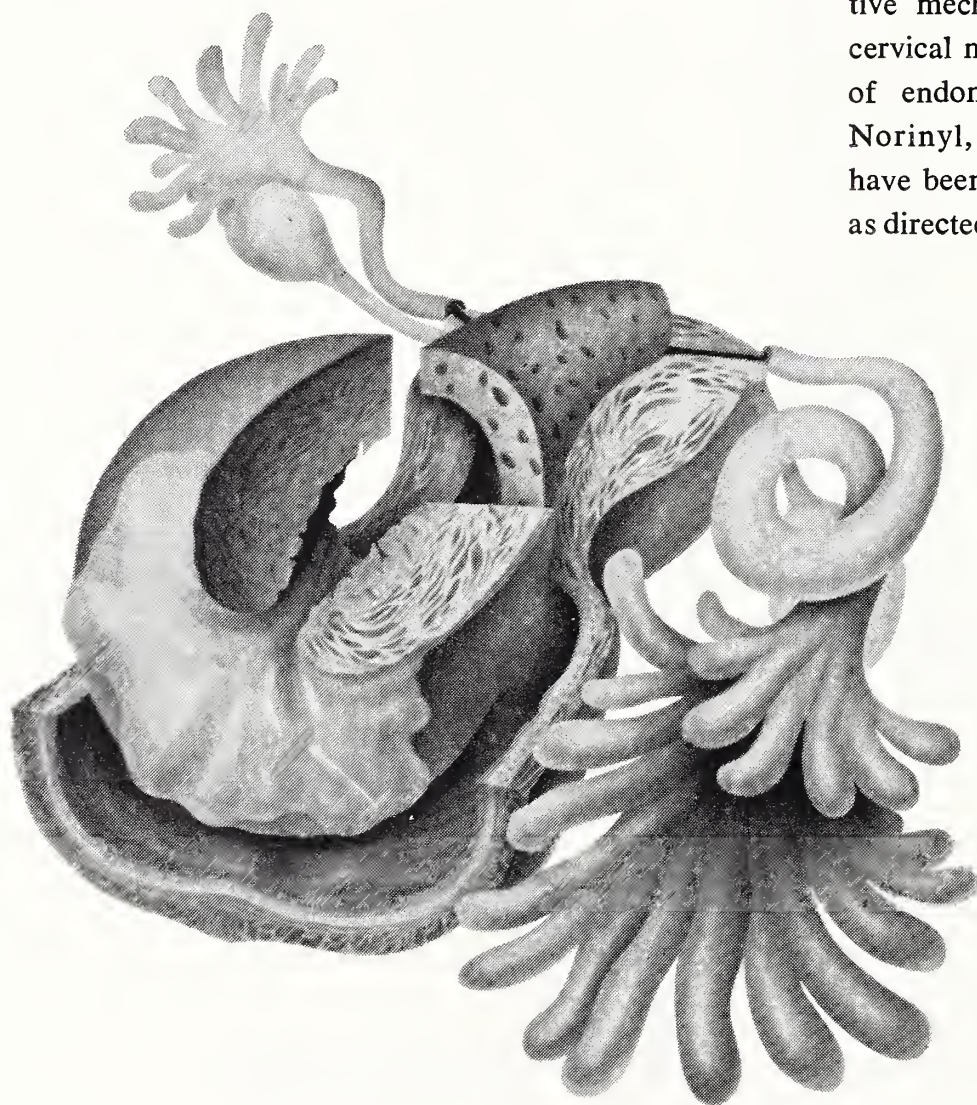
**inhibition of ovulation by means of
2 time-proved hormonal agents**

**production of a cervical mucus hostile to
sperm motility and vitality**

**creation of an endometrium unreceptive
to egg implantation**

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus¹⁻¹³ and an acceleration of endometrial changes.^{1-3,7-16} With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to con-

firm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-

ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism. **Side Effects:** Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
SYNTEX
LABORATORIES INC. PALO ALTO, CALIF.

Norinyl[®] tablets
(norethindrone 2 mg. \bar{c} mestranol 0.1 mg.)
for multiple contraceptive action

carbon dioxide excess and lower pH affect blood flow and its distribution to the lungs and other organs? and, (4) Can drugs or other pharmacologic agents modify this flow?

Neonatal Respiratory Adaptation is PHS Publication No. 1432, and single copies are free to physicians from the Public Information Branch, National Institute of Child Health and Human Development, Bethesda, Maryland 20014.

Medical X-Ray Exposure Is Reported

Americans received an average annual radiation dose of 55 millirads to their reproductive organs as a result of exposure involved in medical diagnostic examinations in 1964, a Public Health Service study has revealed.

The figure (55/1000 of a rad, or unit of absorbed radiation) was described as giving no cause for alarm by Dr. Russell H. Morgan of Baltimore, chief radiologist at Johns Hopkins University and chairman of the Surgeon General's National Advisory Committee on Radiation. The estimate is lower than most previous guesses and is based upon the first U. S. nationwide study, he said.

The current figure compares with results of smaller U. S. surveys and with several national studies in other countries. Dr. Morgan pointed out that Americans now receive an average of twice as many x-ray examinations in a year as do residents of most European countries. "Our level of usage will continue to rise, requiring continuing care to minimize radiation hazards," he predicted.

The government survey indicates that medical diagnostic radiation accounts for only about half as much absorbed dose as the 120 millirads of natural background radiation received annually in most parts of the country, pointed out Dr. Richard H. Chamberlain of Philadelphia. Dr. Chamberlain is professor of radiology at the University of Pennsylvania and chairman of the Public Health Service Medical X-ray Advisory Committee.

"We have no acute problem and no indication of major excesses in radiation exposure for diagnostic purposes," said Dr. Chamberlain. "But there is room for improvement and we feel an obligation to achieve the greatest efficiency in the use of radiation for medical purposes."

The 55 millirads included an estimate of 53

millirads from film procedures and only two millirads from fluoroscopic examinations. This is true despite the higher exposure involved in fluoroscopy because relatively few persons require the more complex studies and because many of those who have passed beyond their reproductive years, explained Dr. Raymond T. Moore of Dallas, deputy director of the PHS National Center for Radiological Health.

The genetic exposure is a cumulative measurement of the amount of radiation reaching the gonads of all persons in a population before or during their reproductive years. With the internal location of a woman's ovaries and the exposed position of a man's testes, both in the lower abdominal region, radiation exposures in this area contribute most of the genetic dose.

Half of all diagnostic x-ray studies are chest examinations but these contributed only four millirads of genetic exposure, according to the PHS estimate. Examinations of the colon accounted for 10 millirads, those of the lumbar or lower spine were rated at 10 millirads, intravenous pyelograms (kidney studies) came to seven millirads, views of the pelvis resulted in four millirads of genetic dose and studies of the upper gastro-intestinal system produced only three millirads. All other examinations including the head, neck, arms and legs accounted for 17 millirads of the annual total of 55.

Spring Circuit Courses Are Set

Circuit course lecturers from the University Medical Center will visit three Mississippi cities this spring to present the five lectures remaining on this year's calendar.

Chronic pelvic pain in the female patient is the subject to be studied in Natchez April 18 and in Columbus April 25. Dr. Calvin T. Hull will discuss the gynecological approach and Dr. Joseph E. Roberts will speak on psychiatric aspects.

Meridian physicians will host three sessions at one-month intervals. On March 7 Dr. William A. Neely and Dr. Heber C. Ethridge will speak on management and plastic procedures in burns. Subsequent lectures in Meridian are set for April 4 and May 9. Dr. Robert D. Currier and Dr. Forest T. Tutor will present the second program which will deal with headaches. The final session, for which cardiac emergencies is the topic, will feature Dr. David G. Watson and Dr. Thomas M. Blake.

Radiologists Move Toward Separate Billing

More than half of the nation's radiologists are sending and collecting bills for their professional services to patients in hospital x-ray departments, according to returns from a survey of its members by the American College of Radiology.

Based on a total of 2,768 replies from a questionnaire sent to 5,800 radiologists in active practice, slightly more than half of those practicing in voluntary hospitals replied that they are billing for all or a majority of their professional services entirely separately from hospital charges.

The replies indicated that 1,031 radiologists or radiological groups are billing for all services and an additional 295 now bill for services in one or more of several hospitals covered. Another 642 radiologists reported that negotiations with hospitals to begin separate billing are still underway or that they expect to begin in January 1967 or later.

Some 250 respondents indicated no intention to seek separate billing and 540 said that their practice did not include a voluntary hospital depart-

ment. These included radiologists in federal service, in full-time teaching or research positions, those practicing only in an office or those recently retired.

"This result puts us well ahead of our prediction that half of the radiologists would make the change by the end of 1966," said ACR President Dr. Jackson E. Livesay of Flint, Michigan. "There has been opposition to separate billing from hospital organizations and from certain insurance carriers in some parts of the country. But much of this is disappearing as the opponents see that separate billing can work to the benefit of all concerned in other areas."

The survey of its members is the second made since the College policy urging separate billing was adopted in October 1965. At that time, an overwhelming majority of radiologists had arrangements with hospitals to collect their fees for them. The arrangement had resulted in numerous problems between radiologists and hospitals and had led to serious gaps in voluntary health insurance coverage of radiology services.

The first billing survey in May indicated that only 139 of 2,224 responding radiologists had begun separate billing by that time. Most of the radiologists now doing their own billing began

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761

ORGANIZATION / Continued

July 1, coincident with the advent of medicare. Those indicating an October 1 beginning were counted as billing separately.

Among the 295 radiologists reporting partial separate billing, most respondents indicated that the change has been made for one or more hospitals out of a group of several. Others said they now bill medicare patients and some bill directly for radiation therapy but not for the general range of diagnostic services.

Some of the responses in all categories reflected a change for a radiologic partnership involving as many as 14 radiologists and covering six or eight hospital x-ray departments. However, these were scored as one reply unless each doctor involved was named.

Among the radiologists beginning separate billing, some have employed extra clerks to handle the bills and collections. Others have retained a commercial billing service and some reported working out an arrangement with the hospital to perform their billing on a straightforward and separate basis from hospital billing.

IBM Opens Medical Liaison Service

International Business Machines Corporation has announced a new medical liaison service to answer technical questions from the medical community about advanced computer applications in the field of medicine. The nationwide information service is being administered by IBM's Advanced Systems Development Division with the cooperation of the company's data processing branch offices located in key cities throughout the United States.

"The IBM Medical Liaison Service offers a new avenue of communications between the physician and the engineer," John M. Norton, ASDD's general manager said. "We hope the medical community will avail itself of our technical competence in medical information handling."

To use the new service, a physician or researcher may telephone his nearest IBM branch sales office and ask for the medical liaison coordinator. Many questions may be answered immediately. Should a query require further reference, the coordinator will contact the IBM medical liaison service center where information from many sources is collected and updated.

Where appropriate, the calling party will be referred to published literature or guided to specific investigators working in his field of interest.

Since 1959, Mr. Norton pointed out, IBM has sponsored seven medical symposia. The purpose of these meetings has been to facilitate the exchange of ideas among physicians, scientists and engineers concerned with the application of electronics to medicine.

In complementing the symposia, the IBM medical liaison service will provide an additional vehicle for the exchange of information on computers and other data processing aids in the life sciences.

Blue Plan Names New Professional Rep

Charles R. Caffey of Leland has been appointed Blue Shield professional relations representative for north Mississippi. He succeeds Elmer M. Kincaid of Jackson who recently retired from the post.



Mr. Caffey

This was the announcement of William G. Shakelford of Jackson, vice president for professional affairs, Mississippi Hospital and Medical Service. Shakelford said that Caffey would work with physicians in a 38 county area in the northern third of the state.

Prior to assuming his new duties in professional relations,

Caffey was in the Blue plan's enrollment division as nongroup supervisor for the Greenville area. Before becoming affiliated with the prepayment plan, Caffey served in the U. S. Navy and was a teacher. He is a graduate of Delta State College.

Active in community affairs, the new representative makes his home at Leland, Miss. He and Mrs. Caffey have two daughters.

Shakelford said that the geographic area assigned to Caffey included Districts 1, 2, and 3 of the state medical association which covers the areas of the Clarksdale and Six Counties, Delta, DeSoto County, North Mississippi, Northeast Mississippi, and Prairie medical societies. About a third of the practicing physicians of the state are located in these 38 counties.

Does he really care?
Is he alert, encouraged,
positive and optimistic
about getting out of bed
and back to work soon?
Or is he giving in to
the depressing impact
of confinement?
When functional fatigue
complicates convalescence,
Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that so often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic[®]

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Dr. Wiser Is New Ob-Gyn Professor

Dr. Winfred Lavern Wiser has been appointed assistant professor of obstetrics and gynecology at the University Medical Center, becoming the newest member of the faculty. The Tennessee native was graduated from the University of Tennessee College of Medicine and received his specialty training at UMC.

Since 1962, Dr. Wiser has engaged in practice at Greenville. In addition to his membership in the state association and AMA, he is Fellow of the American College of Obstetrics and Gynecology and a member of the Mississippi Ob-Gyn Society.

Area Blood Meet Set for Jackson

Physicians, technologists, and administrative personnel from a six state area will be at Jackson March 30-April 1 for the Ninth Annual Meeting of the South Central Association of Blood Banks. Dr. Kenneth M. Heard of Jackson is chairman of arrangements.

Preliminary sessions on March 30 will include an administrative workshop in blood banking and a technical session in the afternoon. The second day will offer a full scientific, administrative, and technical slate of presentations beginning with a welcome address by Governor Paul B. Johnson. The program will be brought to a close on April 1 with a continuation of the prior day's format.

Dr. George J. Hummer, of Santa Monica, Calif., president of the American Association of Blood Banks, is scheduled to appear as a featured speaker. Also on the program in a top speaking assignment is Dr. John A. Shively of Houston, Texas, president-elect of AABB.

Other featured speakers include Dr. Ruth L. Guy of Dallas, associate director of the Parkland Memorial Hospital blood bank and associate professor of pathology, University of Texas Southwestern Medical School; Lt. Col. A. M. Gottlieb of Ft. Sam Houston, chief of blood banking and immunohematology at the Brooke General Hospital; Dr. E. Eric Muirhead of Memphis, professor of clinical pathology, University of Tennessee College of Medicine; and Dr. E. Richard Halden of Ft. Worth, Texas, of the Carter Blood Center.

States included in the South Central Association of Blood Banks are Ark., La., Miss., N. Mex., Okla., and Texas. The group will be headquartered at the Hotel Heidelberg, and the meeting is open to all interested physicians, technologists, and hospital administrative personnel concerned with blood banking.

Dr. Heard said that a golf tournament is set for the new Country Club of Jackson on March 30. About 200 are expected for the meeting.

Manikin Trains Doctors in Resuscitation

Resusci-Anne has died a thousand deaths, only to be revived by the skilled hands of physicians. She happens to be an inflatable manikin furnished by the Mississippi Heart Association for training in cardiopulmonary resuscitation.

In January, the heart association sponsored the



Resusci-Anne, the heart association's inflatable manikin, is brought back from the threshold of "death" under the ministrations of Dr. A. Coleman Pickle of Kosciusko. Observing are, from the left, Drs. W. L. Wood, Jr., of Tupelo, Eugene G. Wood, Jr., of Jackson, Leonard W. Fabian, course instructor, and Maurice A. Taquino of Biloxi.

first training course in this connection at the University Medical Center. Drs. Leonard W. Fabian, professor of anesthesiology, and Hilary H. Timmis, associate professor of surgery, conducted the training for nine physicians representing their respective district heart associations. They, in turn, will conduct local training courses.

AAOS Schedules New Orleans Parley

The second annual practical course on emergency aid and transportation of critically ill and injured persons sponsored in New Orleans by the American Academy of Orthopaedic Surgeons will be held March 27-29 at the Fontainebleau Motor Hotel.

Attending the three-day course of lectures and demonstrations will be safety engineers, ambulance attendants, policemen, firemen, public health, civil defense and other officials dealing with the initial handling of members of the public ill or hurt in accidents.

Introduced in New Orleans last year, the advanced training meeting attracted registrants from New Orleans and 17 other cities in eight states.

The rising highway toll, complicated by the high percentage of serious auto accidents occurring near sparsely populated communities, makes it important that ambulance drivers and others be highly trained in emergency care, according to Dr. Jack Wickstrom, professor of orthopaedic surgery, Tulane University School of Medicine, who orga-

nized the annual program and will direct the course in March.

"It is well established that a fast ride by ambulance is not essential in getting the injured to a hospital," he said. "What is really needed is an emergency crew well trained in the preparation of the injured for transport. There are often only a few minutes to re-establish heart action and breathing, time too short to transport the patient to a doctor for treatment."

To furnish instruction, faculty members of the Tulane University School of Medicine, members of the New Orleans Police Department, New Orleans Fire Department, and others will speak and demonstrate on a wide range of subjects, including resuscitation, cardiac massage, splinting of fractures, burns, and other medical emergencies. Aid to poison and snake bite victims, rescue from electricity, extrication from crushed or overturned vehicles, and even the legal aspects of first aid will be covered.

The course is one of a series being conducted in major cities by the Academy's Committee on Injuries. Similar courses are to be given this year in New York; Huntington, West Virginia; Portland, Oregon; and Miami.



Togetherness....

...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity¹ or side effects^{2,3} and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. 38:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. 20:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311 (Feb.) 1953.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol[®]
phosphorated carbohydrate
solution
emesis control

Medical Careers Booklets Are Available

Placing new and added emphasis on health careers recruitment, the American Medical Association is making available a wide selection of literature pieces for distribution to high school students.

Most comprehensive among the attractive publications is the 144-page paperback book, "Horizons Unlimited," a complete medical careers handbook. Other pieces available include the 60-page booklet, "Medical Scholarship and Loan Fund Programs," and four different brochures. In addition, more than 30 films on medical and allied careers are available for showing on loan. Most popular film is "I Am a Doctor," a highly effective semi-documentary for prospective medical students.

Most of the new literature pieces are available in modest quantity without charge to AMA and Auxiliary members on request from the Program Services Department, AMA, 535 N. Dearborn St., Chicago, Ill. 60610.



Cover of medical careers paperback.

AMA Film Library Increases Services

A total of 14,064 medical and health films were lent to physicians, hospitals, medical schools or other professional groups by the American Medical Association Film Library during 1966.

Most of the films were employed as educational material for physicians, medical students, nurses and paramedical students.

The number of bookings was the greatest ever recorded at the library, increasing 21 per cent over 1965. Total bookings have increased each year since 1955 when 3,007 were recorded, according to an analysis prepared by Ralph Creer,

director of the AMA Section on Medical Motion Pictures and Television.

A major portion of the increase was due to the addition of films formerly distributed by the Association of American Medical Colleges and the American College of Obstetricians and Gynecologists. Analyzing 1966 film bookings further, he said that the largest single users of films from the AMA library were civilian hospitals and schools of nursing. Every U. S. medical school except two and 10 foreign medical schools used the services of the Film Library during the year. Paramedical schools were increasingly heavy users accounting for over 10 per cent of the total bookings.

The library now consists of 2,269 copies of 489 films. The total includes 124 health films which can be used by physicians who are invited to address lay groups. A current list of these films is now available.

A new and revised edition of "Medical and Surgical Motion Pictures," the American Medical Association's catalog of selected medical and health films, is now available. More than 1,000 new film titles have been added in the new edition of the catalog, bringing the total film listings to more than 4,000. Copies of the catalog are available without charge from the Medical Motion Picture Section, American Medical Association.

New Drugs Continue Decade Decline

Fewer new medicines were introduced in the United States in 1966 than in any of the previous 18 years for which accurate records are available, Paul de Haen, Inc., Drug Information Services, has reported.

The number of prescription drug products introduced last year dropped to 80 from 112 the year before. Over a 10-year period the number of new medicines approved by the United States Food and Drug Administration for marketing has declined 80 per cent, de Haen said.

New drug products consist of single chemical agents, duplicates of existing products, combinations of existing products and new dosage forms. Sharpest decline was in the number of single new chemical agents. The figure reached a new low of 12 after a high of 63 in 1959.

This number of single chemical agents introduced in the United States last year was lower than in any of the four major countries of western Europe, de Haen noted. Thirty-four were marketed in France, 42 in Germany, 20 in Great Brit-

and 21 in Italy. One-third of all these drugs are developed by American scientists.

During 1966 the American drug industry marketed in those countries seven new single chemical agents that were not available to physicians in the United States during the year, de Haen said. Two of the seven, however, were approved for marketing in this country in January 1967.

The seven drug products are: a highly potent diuretic, an antituberculosis agent, two tranquilizers, an antidepressant, an antiarthritic and a drug for anemia.

The number of firms introducing new drug products has also declined sharply, de Haen noted, from 127 firms in 1957 to 52 in 1966.

Physicians, Visitors Observe UMC Day



Dr. Robert E. Carter, new UMC dean, second from right, welcomes doctors to UMC Day. From the left are Drs. J. Robert House, Jr., of Mississippi City; W. K. Purks of Vicksburg; and John A. Gronwall, associate UMC dean.

Expert Says Obese 'Think Food'

Four medical authorities on obesity met at Dallas, Texas, in a seminar discussion of what a Swiss investigator has termed "an overlooked but immensely serious disease that is more common than the cold and perhaps a far greater contributor to man's unhappiness and loss of life than even cancer."

This statement, quoted by Dr. Jean Mayer, director of the Department of Nutrition at Harvard University's School of Public Health, marked the opening of the Strassenburgh Obesity Seminar

held under the auspices of Strassenburgh Laboratories.

In his discussion, Dr. Mayer placed particular emphasis on the physiology of obesity and the sensation of hunger. He said that, "Among obese subjects, abnormalities in satiety or satisfaction may be much more common than abnormalities in hunger.

"Despite folklore to the contrary, research seems to indicate that obese subjects miss breakfast, lunch or dinner *more* frequently than the non-obese; they eat sweet desserts *less* often; but they *more* often clear their plates and tend to eat *more* snacks in the absence of hunger sensations.

"However," Dr. Mayer cautioned, "it is at the end of meals that obese subjects differ most from non-obese. They require more will-power to stop eating, even though they report more frequent sensations of discomfort at the end of meals. The obese are frequently preoccupied with thoughts of food *after* a meal, a phenomenon which is rarely found in the non-obese."

Among the other participants in the Strassenburgh Seminar was Dr. Burton Cohen, senior attending cardiologist at St. Elizabeth's Hospital in Elizabeth, New Jersey and assistant professor of clinical medicine at New Jersey College of Medicine and Dentistry in Jersey City. Dr. Cohen is also associate director of the White Cardiopulmonary Institute, Pollak Chest Hospital, Jersey City.

Dr. Cohen discussed the treatment of obesity as a medical disease in office practice. He noted that of 300 consecutive patient physical examinations over an eight-month period, nearly half were classified as obese (more than 15 per cent above standard weight).

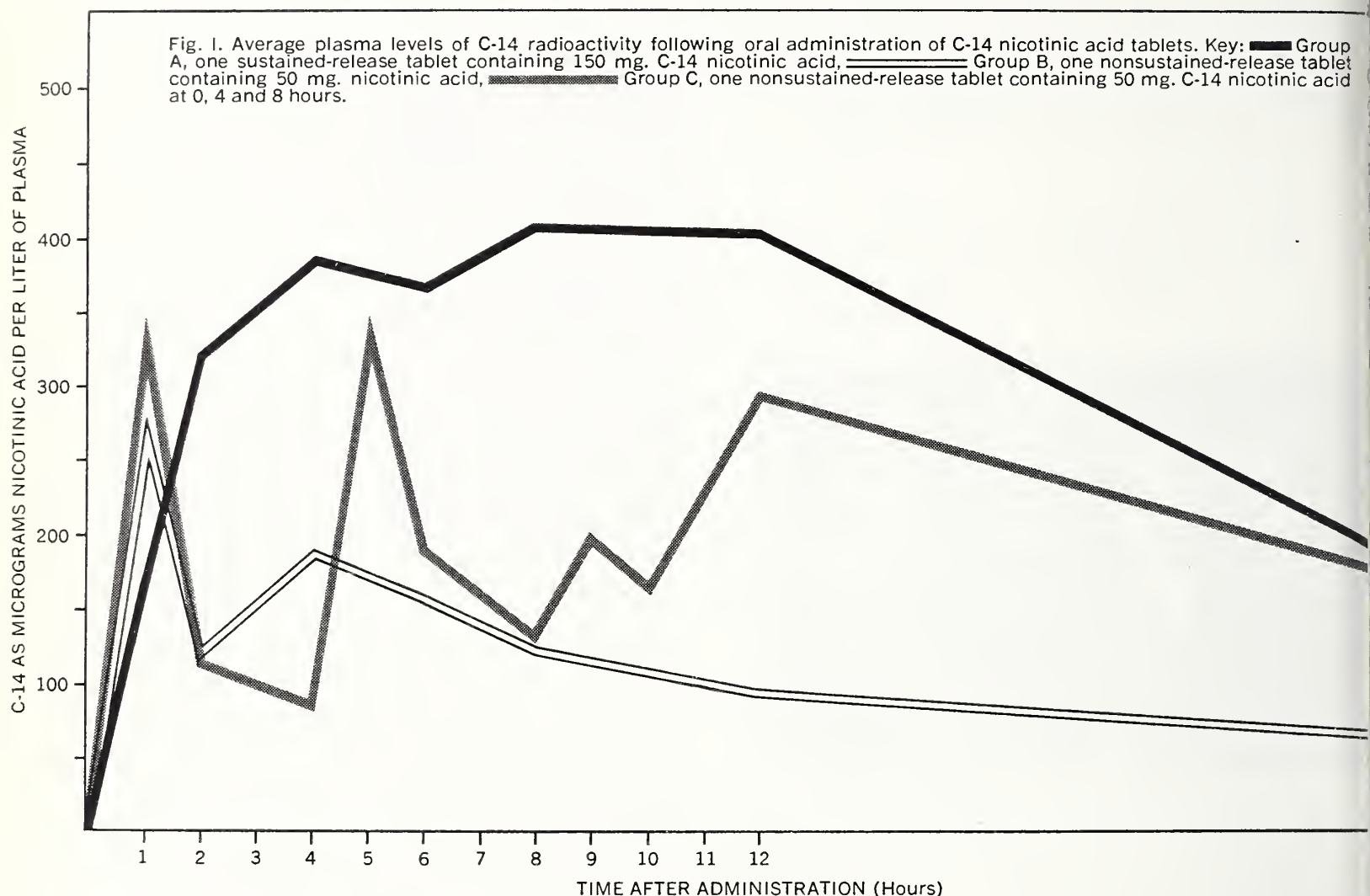
Among this obese group, 12.3 per cent had high blood pressure; 10.3 per cent showed an elevated blood cholesterol level; 9 per cent had a history of gall bladder disease; 7.7 per cent were diabetic; and 6.7 per cent gave evidence of heart damage from arterial blockage.

Dr. Cohen indicated the use of prolonged release anorectic agents as part of a comprehensive supervised program of weight reduction "can produce very satisfactory results."

"Over an average of 6.5 months, 35 obese patients suffering from high blood pressure reduced their average body weight from 204.6 pounds to 171.8 pounds. Average blood pressures for this group dropped from 189.0/105.0 to 138.4/83.3.

"Similarly, in the management of 19 patients with diabetes mellitus, an average weight reduction for the group to 170.9 pounds from 180.8 pounds allowed the average insulin requirement to be nearly halved from an average of 37.0 units to 19.2 units."

Sustained circulatory, respiratory and cerebral stimulation for 12 hours



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation with a minimum amount (if any) of "flushing." cerebrovascular circulation is complemented by tylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more

Dr. Hendrix Is Named to SMA Post

A Mississippi plastic surgeon has been named to one of the four section officer posts in his specialty by the Southern Medical Association. Dr. James H. Hendrix, Jr., of Jackson was elected assistant secretary of the SMA Section on Plastic and Reconstructive Surgery.

The other officers are Drs. Jerome E. Adamson of Norfolk, Va., chairman; Richard W. Vincent of New Orleans, chairman-elect; and Stephen R. Lewis of Galveston, Texas, secretary. The four will be responsible for organizing and presenting their section program at the 61st Annual Meeting at Miami Beach, Nov. 13-16, 1967.

Dr. Guy T. Vise of Meridian is president of the 25,000 member organization which is the second largest general scientific medical association in the United States.

Thoracic Society Meets on Coast

The 11th Annual Tri-State Thoracic Society Consecutive Case Conference was conducted at Biloxi in January and approximately 75 chest specialists interested in tuberculosis and other respiratory diseases attended the scientific sessions.



Panelists at the recent Tri-State Thoracic Society Conference included, left to right: Dr. H. Karl Stauss of Sanatorium, Dr. John F. Busey of Jackson, and Dr. Clyde A. Watkins of Sanatorium. Twenty-five other Mississippi chest specialists were in attendance at the scientific sessions of this conference.

This special scientific meeting is co-sponsored each winter by the Mississippi Tuberculosis Association, the Mississippi Thoracic Society, and the tuberculosis associations and thoracic societies of Alabama and Louisiana.

Dr. Thurman Justice of Gulfport, president of the Mississippi Thoracic Society, also participated in the session and welcomed the group to the Mississippi Gulf Coast on behalf of the society.

MHA Will Sponsor Cardiovascular Meet

The 14th Annual Cardiovascular Seminar sponsored by the Mississippi Heart Association will be conducted at Jackson March 29-31. Site of the meeting will be the University Medical Center.

Heading the three day professional education event is Dr. J. P. Tatum of Meridian, chairman of the association's professional education committee. Co-chairmen are Drs. Thomas M. Blake, associate professor of medicine and director of the heart station, and David G. Watson, associate professor of pediatrics, both of UMC at Jackson.

The annual seminar is a cooperative endeavor of the heart association and medical center, spokesmen said.

Officers of the association are Dr. Eugene M. Murphey, III, of Tupelo, president, and Rep. G. V. Montgomery of Meridian, president-elect, who is also congressman from the state's fourth congressional district. Dr. Tatum is the association's vice president, and Miss Lucile Little of Jackson is executive secretary.

AAP Will Meet in San Francisco

More than 3,000 pediatricians, their families and guests, will attend the American Academy of Pediatrics' annual spring session, April 3-5 in San Francisco.

The meeting, to be held in the new San Francisco Hilton Hotel, will feature closed-circuit television clinical presentations, a diversified scientific program, and more than 120 scientific and technical exhibits.

The scientific program will examine six major areas. These will include child health in contemporary American society, the newborn, neurologic disorders in children, the child from two to six,

ORGANIZATION / Continued

school difficulties: childhood's chief occupational hazard, and adolescent growth and behavior.

Television presentations will be beamed directly from the Presbyterian Medical Center to the San Francisco Hilton Hotel. Televised subjects will include brain tumors, dermatologic disease in the young child, the eye examination, oral biology, and venomous animal injuries.

Also, the Academy and the California Nurses Association will cosponsor a conference for nurses in child health, April 3-4 in the St. Francis Hotel.

The Academy, headquartered in Evanston, Ill., is the Pan-American association of physicians certified in the care of infants, children, and adolescents. It has about 10,000 members in the U. S., Canada, and Latin America.

Dr. Smith Heads Parke, Davis & Co.

Dr. Austin Smith of Detroit, former editor of the *Journal of the American Medical Association*, has been named chairman and chief executive officer of Parke, Davis and Company. As such, he heads one of the largest general line pharmaceutical manufacturing concerns in the world.

Dr. Smith, frequently described as one of the most outstanding medical journalists and administrators in the nation, resigned his AMA post in 1958 to become the first full time president of the Pharmaceutical Manufacturers Association. He left PMA in 1965 to become vice chairman of Parke, Davis.

AHA Publishes Sodium Diet Booklet

A simplified leaflet based on the American Heart Association's booklet, "Your 1000 Milligram Sodium Diet," is now available to physicians from their local heart associations. Like the booklet, the leaflet may be obtained by patients only on a physician's prescription.

Although the diet is the same, the leaflet contains less detail than the 56-page booklet from which it was adapted. Also, when the leaflet is unfolded it becomes a 20 by 14 inch chart for posting in kitchens. In addition to the daily diet plan and food lists, the leaflet carries important infor-

mation on sources of sodium, shopping and cooking, dining out and seasoning use.

This is the second of three planned simplified versions based on the association's diet booklets. The first, "Sodium Restricted Diet, 500 Milligrams," has already been issued. A leaflet based on the mild sodium restricted diet booklet is in preparation.

CIM Publication Is Announced for March

Volume 7 of *Cumulated Index Medicus*, covering the calendar year 1966, will be available from the National Library of Medicine during this month. This was the announcement of Dr. Jöseph Leiter, associate director for Intermural Programs of the library. The volume is expected to contain more than 164,000 citations from the medical literature which were indexed monthly during the year in *Index Medicus*.

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is among the accredited scientific publications indexed by the library. It is also in the permanent stacks of the Library of Congress and in each of the 88 medical school libraries.

Dr. Leiter said that NLM's computer-based MEDLARS (Medical Literature Analysis and Retrieval System) has made possible early publication of the current *Cumulated Index Medicus*. Prior to establishment of MEDLARS, the publication lagged the year covered by six to 12 months.

Ala. MS Seminar Meets in April

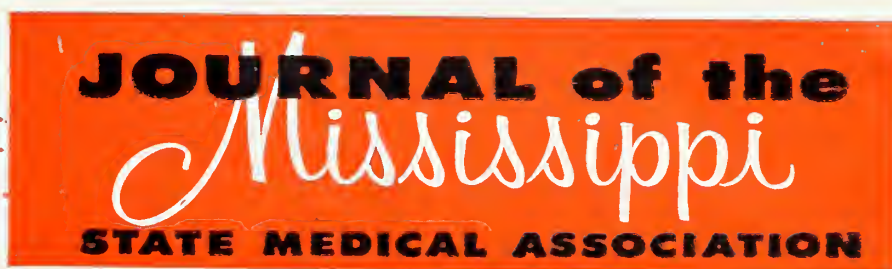
A change in dates for the Seminar on Multiple Sclerosis which will be conducted by the Continuing Education Department of the University of Alabama Medical Center at Birmingham has been announced. The seminar is now set for April 3-4 and will be held at the center in Birmingham.

Originally set for January, the seminar was rescheduled to avoid conflict with other postgraduate programs. It is for physicians. Those interested may obtain details from the University of Alabama Medical Center or from the Central Mississippi Chapter, National Multiple Sclerosis Society, Box 10072, Jackson, Miss. 39206.

Volume VIII

Number 4

April 1967



- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
JAMES T. THOMPSON, M.D.
President
TEMPLE AINSWORTH, M.D.
President-elect
JAMES L. ROYALS, M.D.
Secretary-Treasurer
HOWARD A. NELSON, M.D.
Speaker
WILLIAM E. LOTTERHOS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

CONTENTS

ORIGINAL PAPERS

Restoration of
Vertebral Body
Shape in Children **183** DONALD T. IMRIE, M.D.

SPECIAL ARTICLES

Clinicopathological
Conference LXXXVI **189** University Medical Center
Radiologic Seminar LX **196** ROBERT P. HENDERSON, M.D.
Motor Vehicle
Accidents: An
Unsolved Problem **198** PAUL S. DERIAN, M.D.
Program of the
99th Annual Session **201** From Gavel to Gavel
Handbook of the
House of Delegates **229** Advance Reports

EDITORIALS

The European
Brain Drain and the
Quest for Excellence **233** Exodus to America
North Lawndale: Mail
Order Medical Care? **238** Sears-Roebuck and OEO
Orphanhood: The
Shadow of Family Life **238** One Out of 20 Kids
The ACS and the
Evil of Fee-Splitting **240** A Stronger Stand

THIS MONTH

Meetings **228** Of Mississippi Interest
The President Speaking **232** Task of Decision
The Literature **251** New Books Reviewed
Medical Organization **255** Annual Session Details

Copyright 1967, Mississippi State Medical Association

Special* Blue Cross coverage provides "hospital service benefits"...

*Series X Type Plans



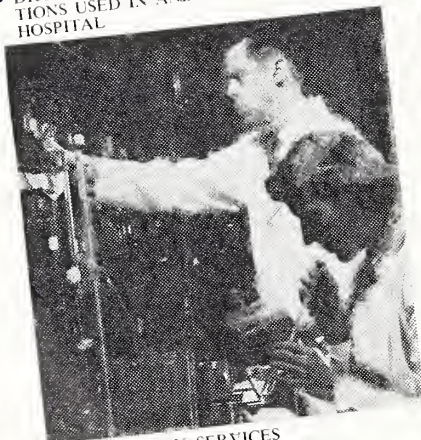
• DRUGS, MEDICATIONS AND PREPARATIONS USED IN AND FURNISHED BY THE HOSPITAL



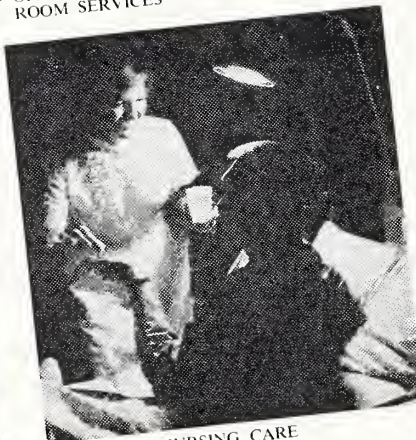
• OPERATING, RECOVERY AND DELIVERY ROOM SERVICES



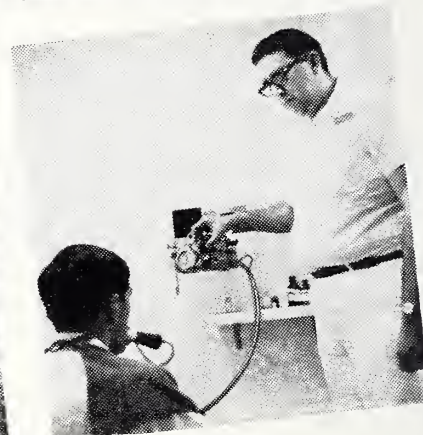
• X-RAYS (IN HOSPITAL)



• LABORATORY SERVICES



• GENERAL NURSING CARE



• OXYGEN

In Blue Cross participating hospitals, these are the benefits marked "paid-in-full" when you have a **Blue Cross Series X Type Contract**. They would add up to a nice sum of money if paid out of your pocket. No other plan gives you so many paid-in-full benefits.

Blue Cross-Blue Shield continually keeps pace with medical progress, providing flexible services that automatically increase in value as hospital care increases in cost and as new services are made available. Blue Cross hospital benefits are based on the actual care individuals need and receive, rather than on a fixed dollar allowance.

It may be wise to examine your present plan, and, if necessary, consider additional protection which is available through Blue Cross-Blue Shield to take care of today's higher costs. Call or write us for complete information.

PLUS THESE "PAID-IN-FULL" HOSPITAL SERVICE BENEFITS...

- DRESSINGS AND PLASTER CASTS
- ELECTROCARDIOGRAMS
- ELECTROENCEPHALOGRAMS
- BASAL METABOLISM TESTS
- PATHOLOGICAL EXAMINATIONS
- PHYSICAL THERAPY
- INTRAVENOUS INJECTIONS AND SOLUTIONS
- ADMINISTRATION OF BLOOD AND BLOOD PLASMA (EXCLUDES COST OF BLOOD AND PLASMA)
- ANESTHESIA (PAID IN FULL WHEN ADMINISTERED BY HOSPITAL EMPLOYEE)

BLUE CROSS BLUE SHIELD

MISSISSIPPI HOSPITAL & MEDICAL SERVICE/P. O. BOX 1043/JACKSON, MISS. 39205



This pain is getting on my nerves.

Patients in pain often experience concomitant anxiety and tension, which may add to the burden of pain.

For such patients, you may want to prescribe a preparation that offers more than simple analgesia.

A good choice is often EQUAGESIC® (meprobamate and ethoheptazine citrate with aspirin). It helps relieve pain. And anxiety. And skeletal muscle spasm as related to pain or anxiety and tension.

Equagesic® TABLETS (meprobamate and ethoheptazine citrate with aspirin)



Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

AHA Discovers Birth Rate Decline

The daily birth rate during 1966 in the nation's community hospitals reached a peak of 9,389 in September, a decline of nearly 5 per cent over the peak month in 1965, according to a survey reported by the American Hospital Association.

Daily birth rate statistics are reported in Hospital Indicators, a monthly feature in the *Journal of the American Hospital Association*. The statistics are based on data from a sample of 628 hospitals selected from a universe of 5,736 community hospitals registered by AHA. The universe represents 80.5 per cent of all hospitals and 91.8 per cent of all hospital admissions.

Since 1961, the birth rate in the nation's hospitals has been decreasing. In the past five years hospitals registered by the AHA have reported a decline of 337,000 in annual births—from a high of 3.75 million in 1961 to a low of 3.41 million in 1965. The trend is toward an even more pronounced drop in total births for 1966.

Blood for Astronauts Is Held Flight Ready

Even blood must be "flight ready" before a Gemini space vehicle lifts off from its launch pad at Cape Kennedy, Fla., according to NASA spokesmen.

Because a certain amount of risk is involved with each space flight, 10 pints of blood for each astronaut or their back-up crew are kept on standby at Cape Kennedy's Air Force Bioastronautic Support Unit in case emergency transfusion is required.

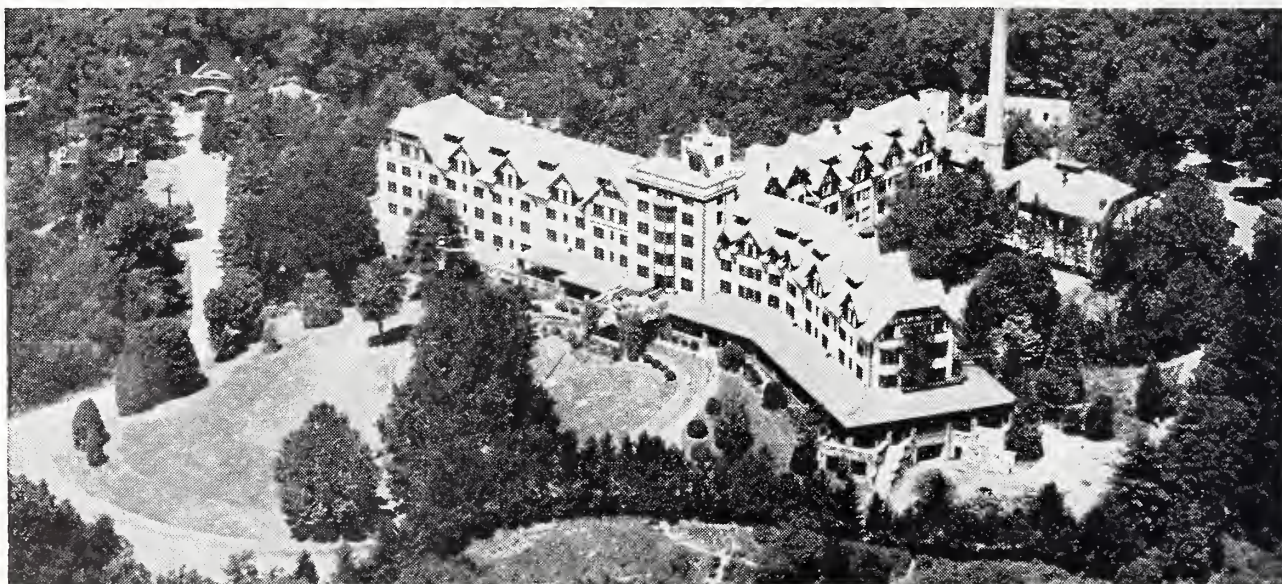
Prior to the recent Gemini 11 mission, for example, blood was drawn from donors and processed at nearby Patrick Air Force Base Hospital for Astronauts Comdr. Charles Conrad, Jr. and Lt. Comdr. Richard F. Gordon, Jr. Just as engineers and technicians checked the reliability of various systems on the Gemini 11 during the countdown, medical technologists at the hospital laboratory checked their testing procedures for determining the safety of this reserve blood.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habitation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

April 1967

Dear Doctor:

Medicare boss Arthur E. Hess has been promoted to Deputy Commissioner of Social Security, and a Blue Cross executive will take his place. Thomas M. Tierney of Denver will succeed Hess as Director of Health Insurance, heading the entire Medicare program.

Hess is former chief of the Social Security disability program and a 27-year career man in the administration. Tierney is president of Colorado Blue Cross and has been active in the development of the Medicare program.

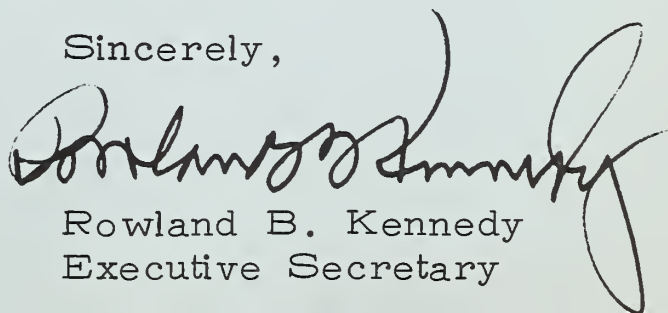
Newest medical publication is Diagnostica, a bimonthly journal devoted exclusively to diagnosis. Published by the Ames Company, it will appear in seven languages to report advances in presymptomatic detection, diagnosis, and management of disease and metabolic disorders. A massive circulation program aims at world-wide coverage of those in private practice.

A Mississippi College professor, Albert L. Craven of Clinton, will soon publish a book on the impact of Medicare on hospital cost control. The work is a doctoral dissertation in the science of accounting under the auspices of the University of Alabama. It will probe in depth cost finding problems under Medicare and suggest methodology for improving hospital accounting procedures.

Member firms of the Pharmaceutical Manufacturers Association have contributed more than \$600,000 worth of vitamins to famine-stricken India. Most help went to hard-hit Bihar area where an estimated 25 million people suffer from malnutrition. At least 6 million are children under age 14. PMA made arrangements for the voluntary aid.

A University of California pharmacologist has gone Galen one better on the ancient saw that "wine is the nurse of old age." Dr. C. D. Leake says that wine is about the best medicine for the elderly, recommending it as an appetite stimulant, analgesic, tranquilizer, sedative, and anti-hypertensive. Dr. Leake ought to know: He is also medical director for the California Wine Advisory Board.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

Workmen's Compensation Commission Supports Chiropractors

Jackson - R. D. Everitt, chairman of the Mississippi Workmen's Compensation Commission, says that "we have always held, and still hold, that if an employer refers an industrially injured employee to a chiropractor, they are liable for services rendered just as much so as if he were a medical doctor." Everitt, a former state senator, supported licensure of chiropractors in the legislature.

Medicare Poses Problems, Hospitals Say

Chicago - Writing in the Journal of the American Hospital Association, a hospital administrator says that the 2 per cent capital depreciation allowance for hospitals serving Medicare patients should be raised to 17 per cent. Dr. E. A. Johnson of Gary, Ind., feels that if allowance isn't raised, hospitals cannot continue to develop plants and services. Since program began last July, average hospital stay of Medicare patients has increased from 11.2 days to 13.3 days. National average per patient day cost in hospitals is \$56.69 of which \$35.28 is payroll for hospital employees.

Radioactivity 'Immunity' Puzzles Scientists

New York - While the resistance of invertebrates to gamma rays is well-established, French scientists are puzzled at the apparent immunity of the deadly African scorpion to radiation. Experiments in French Sahara nuclear tests showed that a dose of 80,000 roentgens didn't bother the scorpion, and they survive two days under 154,000 roentgens. Report says that understanding of this resistance might be one of medicine's biggest breakthroughs.

PHS Revises International Vaccination Certificate

Washington - The U.S. Public Health Service International Certificate of Vaccination, PHS-731, has been revised to meet new requirements for travelers in all parts of the world. Also noteworthy is fact that PHS provides for vaccinations being given by a private physician. To secure forms, patients may be referred to local health department or their travel agents.

Blue Shield Enrollment Hits New Highs

Chicago - The National Association of Blue Shield Plans reports that nearly 60 million North Americans are covered by prepayment for medical services, and many more are served by Blue Shield under other programs. The plan is administering a major part of 1-B Medicare coverage with 7.3 million seniors receiving benefits from Blue plan carriers. Enrollment increase in 1966 was 1.2 million contracts, a growth rate of 2.1 per cent.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

DESCRIPTION INFORMATION

For initiation of therapy: Cream 0.025%, 15 and 15 Gm. tubes, 425 Gm. jars; **for maintenance effect:** Ointment 0.025%, 15 n. tubes; **for maintenance therapy:** Cream 0.01%, 15 and 45 Gm. tubes, 120 n. jars; **for intertriginous or hairy areas:** Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; **for infected inflammatory dermatoses:** Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and trichinella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. **PRECAUTIONS:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for pro-

Representative Clinical Results with Synalar*			
Efficacy Documented in over 4,000 Patients			
Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

longed periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. **SIDE EFFECTS:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. *Ann NY Acad Sci* 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. *Proc Soc Exp Biol Med* 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: *Methods of hormone research*, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from
SYNTEX 
 LABORATORIES INC., PALO ALTO, CALIF.

For inflammatory dermatoses...
 by any measure
 a topical corticosteroid
 of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram
 one of the most active topical
 corticosteroids available

Rapid and predictable
 in antiinflammatory and
 antipruritic activity

Results often comparable to
 those of systemic corticosteroids
 with fewer hazards

AMA Auxiliary Sets Atlantic City Meet

Dr. Mary Calderone, noted proponent of sex education, will be one of the speakers at the 44th Annual Convention of the Woman's Auxiliary to the AMA, June 18-22, in Atlantic City. Convention headquarters will be the Shelburne Hotel.

Dr. Calderone's talk, "Sex Education: Goals and Means," is scheduled for Tuesday morning, June 20, according to Mrs. Asher Yaguda, Newark, N. J., Auxiliary president.

Also speaking on Tuesday will be Dr. Charles L. Hudson, AMA president. Dr. Hudson's talk will be made at the luncheon honoring Auxiliary past presidents and AMA officers and trustees. The Auxiliary's contribution to AMA-ERF will be presented at that time, as well as awards to county and state AMA-ERF winners.

Mrs. Yaguda and Mrs. Karl F. Ritter, Lima, Ohio, president-elect, will be honored at a reception Sunday, June 18. Mrs. Ritter will be installed as president Wednesday, June 21.

Other convention highlights will be "The Little Workshop," a question-and-answer session on Auxiliary programs, and reports on community service, international health activities, health careers, legislation, mental and rural health and safety-disaster preparedness projects. State auxiliary presidents will discuss outstanding local programs at the Monday and Tuesday sessions.

The Auxiliary will also sponsor a teen-age program for children of physicians and guests attending AMA convention, held concurrently with the Auxiliary meeting. A Sunday afternoon mixer and pool party are among the events planned.

Bug Collector Is Believed at Large

Dr. William D. Lazenby of Opelika, Ala., was recently "de-bugged," according to *Alabama M.D.*, the newsletter of the Medical Society of the State of Alabama. It all happened when he was making rounds at the Lee County Hospital where he is a staff member.

Dr. Lazenby parked his Volkswagen in the usual physicians-only lot but found it gone when he concluded seeing his patients.

Alabama M.D. says it was no doubt a bug collector.

Tandearil® oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN®-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.



701358

AMA Supports Nursing Salary Raise

A "significant improvement in the income of the registered nurse" has been called for by the American Medical Association.

The Board of Trustees and AMA's Committee on Nursing support the need for a significant improvement in the income of the registered nurse, recognizing that there will be considerable variation in compensation depending upon the prevailing local conditions, training, experience, and degree of delegated responsibility.

The Board of Trustees said:

"The House voted at the Clinical Convention just ended to 'support the need for a significant improvement in the income of the registered nurse.'

"The House noted that the American Nurses' Assn. in June adopted a national salary goal of \$6,500 for registered nurses beginning practice. But the House agreed with the report of the Board of Trustees and the Committee on Nursing which questioned such a national salary goal, establishing a minimum rate of compensation for the entire country.

"A salary for registered nurses should be controlled by economics and the supply or demand in the part of the country where the nurse is employed. There is considerable variation in compensation depending upon the prevailing local conditions, training, experience, and the degree of delegated responsibility."

AHA Says Nurse Turnover Is Costly

The high rate of turnover among professional nurses is a costly experience for hospitals and it also has an effect on the quality of patient care the hospital is able to provide, according to the American Hospital Association.

The association pointed out that the hospital makes a substantial investment in each new nurse it hires. The cost of replacing a nurse is the sum total spent to accomplish the replacement—interview time, hiring, orientation and training sessions must be taken into account. AHA said:

"Because the highest dollar cost is attributable to the new nurse's inexperience the hospital's effectiveness as a treatment organization becomes implicated in the replacement process."

Chloramphenicol Is Defended by CMA

A special study committee of the giant California Medical Association has concluded that "no reasonable basis exists for enactment of a special legislative category to restrict the use of the drug chloramphenicol by licensed physicians in California."

The Committee on Adverse Drug Reactions of CMA made the study in response to two resolutions of the California legislature in collaboration with the State Department of Public Health and the California Pharmaceutical Association. The study included consideration of 300 fatal cases of aplastic anemia.

The report, which will be presented to the 1967 regular session of the California legislature, states that "it is not in the best interests of the public or the practice of medicine to restrict the administration of chloramphenicol to patients in hospitals. There are several serious conditions for which this agent may be specifically indicated and well controllable in ambulatory patients."

Viet Nam Is Worst, Says Medical Mission

Half of the children born in Viet Nam do not live to the fifth year of life, and the life expectancy of the average Vietnamese is 35. These are vital statistics reported by medical missions in the war torn south of the Asian hot spot.

About 8 per cent of all Vietnamese infants die in the first week of life, the reports said, and 80 per cent of the population suffer from trachoma.

The unhealthy climate shows up in American servicemen, the reports disclosed. Although they are immunized against most contagious disease entities, there is still a high hospitalization rate for intestinal, respiratory, and dermatologic conditions. Most new arrivals need five days to accommodate to the time cycle change and two weeks to become accustomed to the temperature and humidity.

About 50 per cent of all American personnel in Viet Nam develop some form of diarrhea during the first 60 days in the country. Returning service personnel are hosts for micro-organisms, especially malaria.

The reports summed up by saying that "there is no good country in which to fight a war, but Viet Nam is the worst."



One by one the family's downed Because the G.I. bug's around

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin,
and protects intestinal mucosa

Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.



Parepectolin[®]

Each fluid ounce of creamy white suspension contains:

*Paregoric (equivalent) (1.0 dram) 3.7 ml.
Contains opium ($\frac{1}{4}$ grain) 15 mg. per fluid ounce.

warning: may be habit forming

Pectin (2½ grains) 162 mg.
Kaolin (specially purified) (85 grains) 5.5 Gm.
(alcohol 0.69%)

Usual Adult Dose: One or two tablespoonfuls three times daily.

Usual Children's Dose: One or two teaspoonfuls three times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.



"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"



ORIGINAL PAPERS

Restoration of Vertebral Body Shape In Children

DONALD T. IMRIE, M.D.
Vicksburg, Mississippi

WHAT DEGREE of regeneration can one expect in the case of a collapsed vertebra? In adults, even when the lesion is a benign one and the process heals, permanent deformity persists. Some degree of regeneration can be expected in children, however, when a vertebra collapses as the result of a benign lesion. Reports of these cases in the literature are not plentiful. The author therefore presents his observations in three cases which he feels he has followed long enough to warrant some conclusions, hoping that the addition of his findings to the limited reports already in the literature may help to make prognosis in cases of vertebral collapse in children a little easier.

Before 1927 non-traumatic collapse of a child's vertebra was diagnosed presumptively as Pott's disease. In that year Jacques Calvé¹ reported two such cases which had shown remarkable healing without abscess formation or neurologic deficit. He concluded that these lesions must "be to the spine what coxa plana is to the hip, and Kohler's is to the foot." For three decades Calvé's disease was accepted as a form of osteochondritis affecting the body of the vertebra in children, usually between the ages of 2 and 6. Traditionally it was contrasted with Scheuermann's disease, or epiphysitis vertebra, which affects children in the older age group of 12 to 14.

In 1954 Compere, Johnson, and Coventry² reported four cases of Calvé's typical "coin on edge" lesions which had been biopsied and diagnosed histologically as eosinophilic granulomata. They quoted Fairbanks as having predicted that vertebra plana would eventually be proved to be, not a clinical entity, but a manifestation of granulomatosis. Nine years later Compere³ and his colleagues

Some degree of regeneration can be expected in children when a vertebra collapses as the result of a benign lesion. The author presents his observations in three cases, including two cases of vertebra plana and one case of compression fractures due to steroid osteoporosis.

were even more convinced that granulomatosis is one, if not the only cause, of true vertebra plana.

On the other hand, not all authorities are ready to abandon the concept of osteochondritis. Adams⁴ says that it is possible that this is indeed the true explanation in some cases. Goff⁵ wrote in 1954, "This is a true osteochondrosis." In a recent personal communication⁶ he wisely points out that the typical radiological features may well be used to indicate a preliminary diagnosis of osteochondrosis, but that for proper diagnosis biopsy is necessary. Furthermore, he reminds us

From the Departments of Orthopaedic Surgery, the Street Clinic and the University of Mississippi School of Medicine.

that needle biopsy, although less hazardous than previously thought, may not be truly diagnostic just because a preponderance of eosinophiles is found in the cancellous bone.

Granted that the etiology of a sclerosed wedging of the vertebral body in a child has not been fully settled, there has been a gradually increasing optimism regarding prognosis.

In 1952 Steindler⁷ said "... the deformation of the vertebra is final." In 1961 Adams⁴ said, "... later the bone may develop surprisingly well, but it is doubtful if it is ever restored back to its full depth." Now Wiles and Sweetman⁸ say "the lesion heals in time and the bone is reconstituted, often without any residual deformity." What one can really expect apparently falls somewhere toward the latter end of this spectrum of opinions. Fripp,⁹ reporting four cases of vertebra plana (one case of his own and three of his colleagues) which had been followed into adulthood, describes the residual deformities as "three-fourths," "two-thirds,"

"regeneration," and "very slight narrowing." All of these cases showed the characteristic wedging described by Calvé,¹ but biopsies had not been done, nor were skeletal surveys complete.

It is even more difficult to find the end results of compression fractures in a growing vertebra. This deformity is becoming more common now that steroids are used in the treatment of various



Figure 1. Case 1. Twenty-seven-month-old boy had a stiff neck for three weeks. The seventh cervical vertebra has collapsed rapidly with wedging, but preservation of intervertebral spaces is characteristic of vertebra plana (Calvé's disease).



Figure 2. Case 1. Compare with Figure 1. Nearly nine years later there is 75 per cent restoration of the seventh cervical vertebral body. Four months of cervical traction had been followed by one year in a Thomas collar with restriction of activities.

children's disorders. Curtiss¹⁰ cites pathological compressions in a 9-year-old boy with severe osteoporosis following steroid therapy of Still's disease. In his illustrations the involved vertebrae seem to have lost as much as $\frac{1}{2}$ of their height. No mention was made of regeneration, and follow-up films were not shown.

Our observation in three cases show regeneration over periods of three to ten years in seven different vertebrae. This experience may be of help to others.

CASE 1

A 2-year-old male had stiffness in the neck for two weeks, and x-rays showed a destructive lesion in the seventh cervical vertebra with apparent diminution of the intervertebral spaces and more fuzzing than is to be expected in Calvé's disease.

He had a low-grade fever and an equivocal Mantoux reaction. A presumptive diagnosis of early Pott's disease was made. The area was not considered favorable for biopsy. Medical management was carried out and head halter was used for balanced traction in the hospital, then continued for three more months at home.

When allowed up, he wore a Thomas collar and his activities were restricted during the subsequent 12 months. Serial x-rays showed no abscess shadow; there was no involvement of pedicles and the intervertebral spaces subsequently increased. Condensation progressed and the vertebral body wedging become characteristic (Figure 1). This, then, was a case of vertebra plana probably due to a solitary lesion of eosinophilic granuloma.

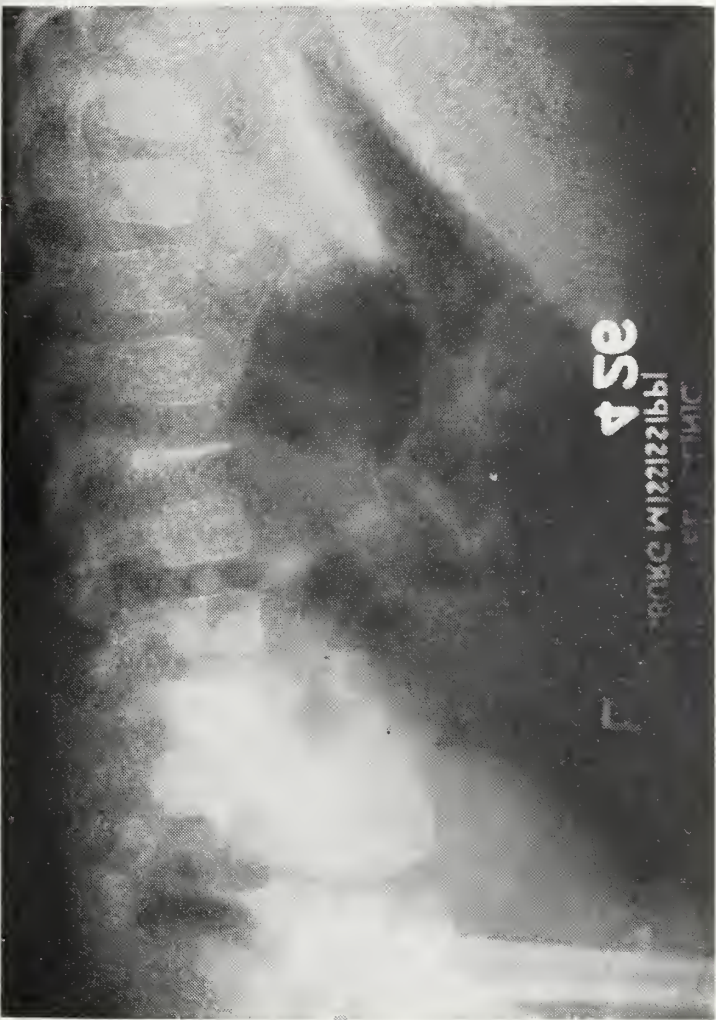


Figure 3. Case 2. At age 3½ years a boy who had destructive lesions of the mandible, skull, ribs, femur, tibia, ilium and third lumbar vertebra has characteristic appearance of Calvé's disease. Mandibular biopsy at 21 months showed eosinophilic granuloma.

X-rays nine years later show the seventh cervical vertebra to have regenerated to a respectable 75 per cent normal stature (Figure 2). This in contrast to only 12 per cent in the early phases. The patient is asymptomatic, and no other lesions have developed.



Figure 4. Case 2. At age 5½ patient is having back symptoms. Note collapse of T 5 and 6, characteristic of Calvé's disease.

CASE 2

A 21-month-old boy developed destructive lesion in the mandible. This was curetted, and microscopic sections proved it to be an eosinophilic granuloma. Subsequently lesions were demonstrated in the skull, femur, tibia, ilium, mid-dorsal spine, third lumbar vertebra (Figure 3), ribs and scapula. Most of the lesions were treated with small doses of radiation, and he was on Aureomycin for a year. When involvement of dorsal vertebrae (Figure 4) was seen and backache developed, a brace was fitted and his activities were restricted. Bed rest was not enforced.

Now at the age of 12 the lesions have healed, leaving no trace in any bone except the vertebrae. He is asymptomatic, has no clinical gibbus, and leads an essentially normal life. The sixth dorsal vertebra has regenerated to about 53 per cent normal height. The fifth dorsal now has approximately 88 per cent normal stature (Figure 5). The third lumbar has regenerated from only 14 per cent in 1956 to 75 per cent normal height in 1965, as accurately as can be measured on standard x-ray projections (Figure 6).

CASE 3

This case represents a very different type of pathology. A 12-year-old girl had been on moderate doses of steroids for a period of nearly a year. This had been necessary for controlling the crises of idiopathic thrombocytopenic purpura. More back pain developed, x-rays were repeated and three of the porotic vertebrae showed compression deformities (Figure 7). The patient was treated with bed rest and extensor exercises. When it became apparent that steroids were not controlling the crises, a splenectomy was done. The blood picture then began to improve and it was possible to taper off and finally discontinue use of the steroids. Now nearly two years following their collapse the vertebrae are returning toward normal density and a good 90 per cent regeneration is apparent (Figure 8).

In Calvé's report one of the characteristic x-ray features described was an appearance of "less

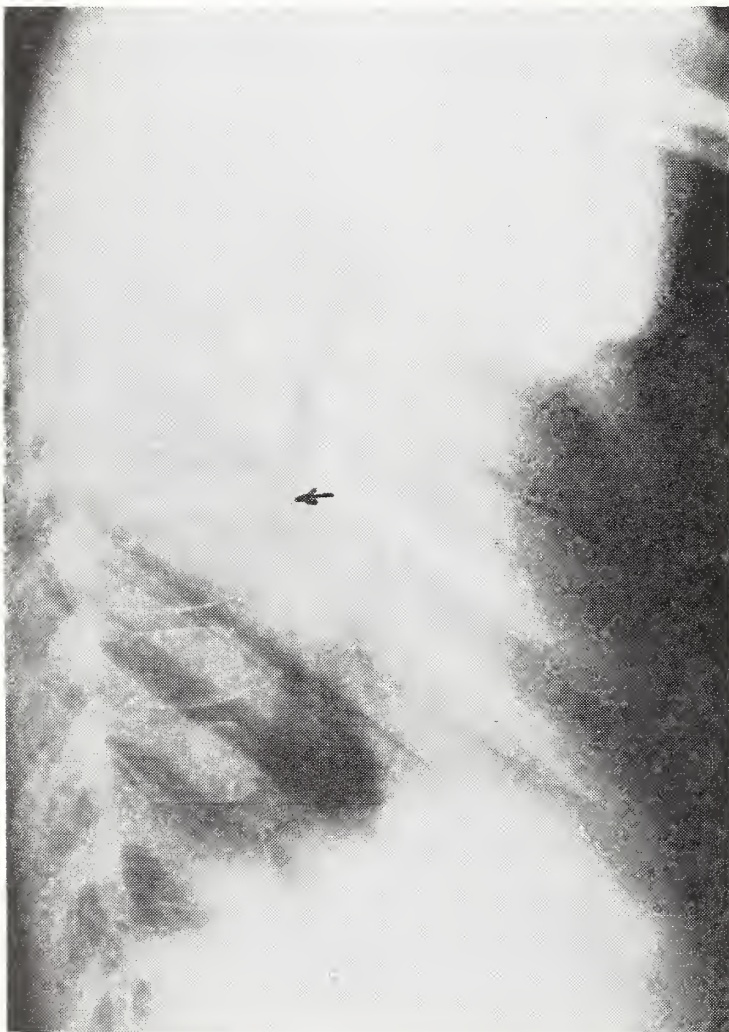


Figure 5. Case 2. Compare with Figure 4. The sixth dorsal vertebra now shows 53 per cent normal stature at age 12. Patient is asymptomatic without gibbus or clinical deformity and his activities are normal.

bone and more cartilage."¹ If vertebrae grew in height as tubular bones grow in length, with epiphyseal plates contributing longitudinal growth, it would be easy to understand the surprising potential for regeneration. Beadle,¹¹ quoted by Caffey,¹² demonstrated that there is no growth or endochondral bone formation from the cartilagi-



Figure 6. Case 2. Compare with Figure 3. There has been 75 per cent regeneration of L 3 in nine years' growth. A back brace was used for nearly a year and activities curtailed for about two years.

nous plates. These are ring cartilages, seen on edge in lateral x-ray projections and having the appearance of epiphyses. They ossify independently of the primary center which constitutes the body of the vertebra and to call them epiphyses is, he says, a misnomer. They actually bear no direct relationship to the longitudinal growth and contribute nothing to endochondral bone formation. These ring epiphyses complete their calcification and fuse with the body of the vertebra after growth is complete. They do contribute some to its final adult shape but not to its stature.

IMPRESSIVE GROWTH

Knowing that the primary epiphyseal center is necessary for longitudinal growth makes it difficult

to visualize restoration of the vertebral height from a wafer-thin sclerotic segment that looks in the lateral film like a coin on edge. To see such a vertebra regain 90 per cent normal height in a nine-year period is very impressive. One must conclude that the primary center and its growth potential is preserved even within this thin dense wafer of bone.

FRIPP'S METHOD

Frupp's⁹ cases were treated with recumbency on a frame for five months or longer. The best regeneration is seen in that case which had been hospitalized for two years, and then wore a celluloid jacket for another two years. The author

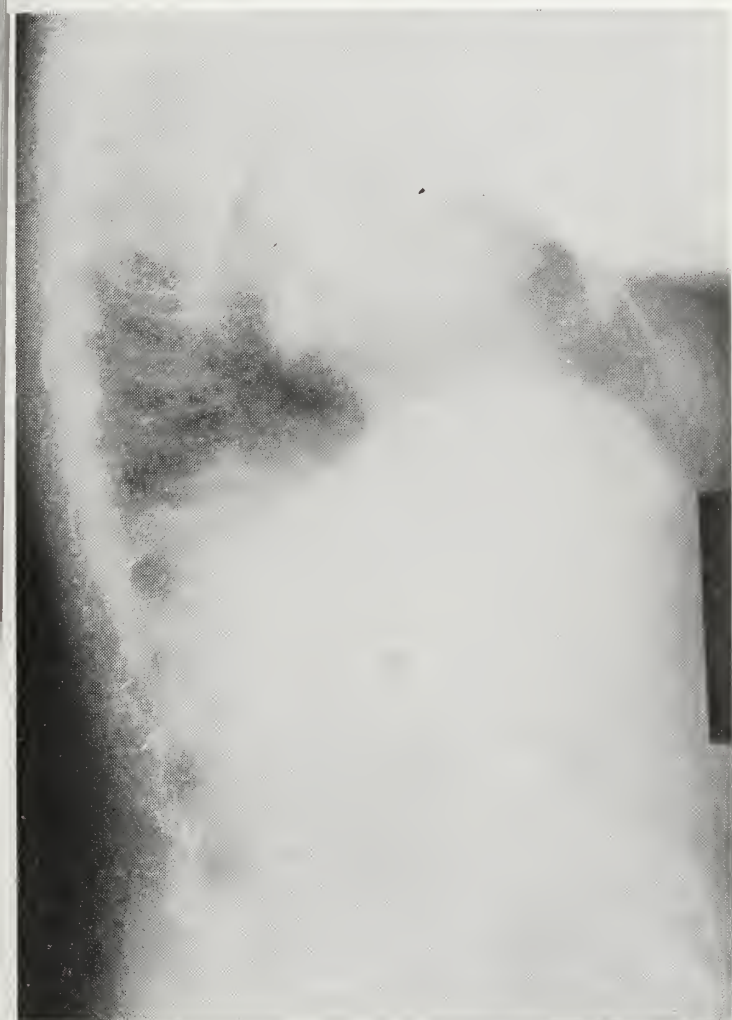


Figure 7. Case 3. Osteoporosis in a 12-year-old female on steroid therapy for idiopathic thrombocytopenic purpura. Wedging of T8 and 9 is especially apparent. Note severity of osteoporosis. Collapse developed during an interval of only 12 days.

used head-halter traction in his first case, followed by a Thomas collar, and used back braces for the second and third cases combined with regulation of activities and extensor exercises throughout periods of six to twelve months.

Eosinophilic granuloma is said to heal spontaneously regardless of treatment, but small doses of x-ray therapy seem to speed its healing. There



Figure 8. Case 3. Compare with Figure 7. In 16 months, with discontinuation of steroids made possible by splenectomy, there has been nearly complete restoration of vertebral bodies. Patient was recumbent with extensor exercises for six months and wore a Taylor back brace for another nine months. Even further recalcification and vertebral growth has taken place since this film.

has been no convincing proof that Aureomycin is of benefit.

In the case of pathological compression of vertebrae, attention must be directed toward reversing the porosis. Reducing the steroids and maintaining extensor exercises are the most effective means of doing this.

There are no control studies to show that external support or regulation of posture and activities produces better restoration of the vertebra, but presumably superincumbent weight in an attitude of forward flexion interferes with regeneration, at least to some degree.

SUMMARY

Two cases of vertebra plana and one case of compression fractures due to steroid osteoporosis in a child, have been observed. Restitution of vertebral height has been measured and compared

VERTEBRAL SHAPE / Imrie

with the few reports available in the literature. In both conditions, the growth potential in children is surprisingly good, and restoration of at least 50 per cent and often as much as 90 per cent of normal vertebral body height can be anticipated. The degree of regeneration is probably greatest when prolonged recumbency is enforced, but can be quite satisfactory with judicious use of support, posture control and regulation of activities. ★★★

The Street Clinic (39180)

REFERENCES

1. Calvé, J.: A Localized Affection of the Spine Suggesting Osteochondritis of the Vertebral Body with the Clinical Aspects of Pott's Disease, *J. Bone & Joint Surg.* 7:41, 1925.
2. Compere, E. L.; Johnson, W. E., and Coventry, M. D.: Vertebra Plana (Calvé's Disease) Due to Eosinophilic Granuloma, *J. Bone & Joint Surg.* 36-A: 969-978 (Oct.) 1962.
3. Compere, E. L.; Johnson, W. E., and Coventry, M. B.: Vertebra Plana (Calvé's Disease) Due to Eosinophilic Granuloma, *J. Bone & Joint Surg.* 45-A: 1322 (Sept.) 1963.
4. Adams, J. D.: Outline of Orthopaedics, ed. 4, Baltimore, The Williams & Wilkins Company, 1961. pp. 189.
5. Goff, C. H.: Legg-Calve-Perthes Syndrome, Charles C Thomas, Springfield, Ill. 1954, pp. 206.
6. Goff, C. W.: Personal Communication, 1966.
7. Steindler, A.: Post Graduate Lectures on Orthopedic Diagnosis and Indications, Charles C Thomas, Springfield, Ill., 1952, vol. 4, p. 279.
8. Wiles, P., and Sweetman, R.: Essentials of Orthopaedics, Boston, Little, Brown & Company, ed. 4, 1965, p. 500.
9. Fripp, A. T.: Vertebra Plana, *J. Bone & Joint Surg.* 40-B:378, 1958.
10. Curtiss, P. H., Jr.: Vertebral Fractures Resulting from Prolonged Use of Cortisone and Corticotropin Therapy, *J.A.M.A.* 156:467, 1954.
11. Beadle, O. A.: The Intervertebral Discs, Special Report Service, No. 161, Medical Research Council, London, His Majesty's Stationary Office, 1931 (Quoted by Caffey).
12. Caffey, J.: Pediatric X-ray Diagnosis, ed. 4, Chicago, Year Book Medical Publishers, Inc., 1961, pp. 1163.

REGNUM LYNDON

Two workers were busily engaged in tidying up the White House grounds. Each was equipped with a trash collector on rollers and a pointed stick with which to pick up paper and refuse.

Just as one was about to spear a piece of paper, a gust of wind whipped it up and blew it into the White House through an open window. Hastily, one worker rushed into the building but returned almost immediately. With a puzzled look, he said to his co-worker, "I was too late. He had already signed it, but he did give me one of the pens."

Clinicopathological Conference LXXXVI

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

THIS WAS THE SECOND University Medical Center admission of this 66-year-old colored male who entered with chief complaint of "sores on legs and feet" of 27 years' duration.

The patient dated the onset of his illness to 1939, at which time he received a gunshot wound to the right popliteal area. Following this, he developed chronic ulcers of the right leg. He was next seen in the Surgery Clinic following nail puncture wound to the left foot. He was found to have chronic ulceration of both feet and "cellulitis" of the left leg. The patient was seen many times subsequently for the chronic "ulcerations" of the right leg and both feet. Response to therapy was poor.

In November 1964, the patient was admitted to the University Medical Center for treatment of fracture and dislocation of C₅ and C₆, following a motor vehicle accident. This was treated adequately with Crutchfield tongs.

On April 14, 1966, he presented in the emergency room complaining of dyspnea on exertion and orthopnea of one week's duration. A chest film at that time revealed cardiomegaly and right pleural effusion. He was given prescriptions for digitalis and chlorthalidone. However, these were never filled because of "lack of money."

On April 30, 1966, he returned to the emergency room complaining of hemoptysis of one week's duration, increasing shortness of breath, four pillow orthopnea, and generalized "swelling." The ulcerated areas on both legs were infested with maggots. At that time he was noted to be markedly jaundiced. A chest film revealed increased cardiomegaly and increased right pleural effusion. He was digitalized and started on antibiotics. The patient was discharged from the emergency room to be followed in the out patient department. However, on May 1, 1966, the patient

was admitted for further evaluation concerning jaundice and chronic ulceration of lower extremities.

The patient denied blood transfusions, exposure to hepatitis, excessive alcoholic intake, high blood pressure, smoking, chest pain, exposure to tuberculosis, night sweats or family history of diabetes. He noted that his urine had been dark for the past week, but denied any change in color of stools.

Blood pressure was 116/80; pulse 90; respirations 24; temperature 98.6 degrees Fahrenheit; weight 163 lbs. He was a well-developed, poorly

In this month's CPC, Dr. Robert E. Tyson discusses the case of a patient who entered with a chief complaint of "sores on legs and feet" of 27 years' duration. Other discussers are Drs. Robert D. Sloan and Walter S. Gilmer.

nourished, colored man who appeared chronically ill and was icteric. He had minimal distention of neck veins bilaterally. There was pitting edema up to the level of the fifth thoracic vertebrae. There were bilateral inspiratory and expiratory rales, and dullness of the lower one-half of the right hemithorax. The cardiac rhythm was irregular and a Grade I/VI diastolic murmur was noted along the left sternal border. The point of maximal impulse was in the 5th intercostal space of the left anterior axillary line. His liver was palpable two centimeters below the right costal margin. There were several ulcerations noted on both lower extremities and a "large" open ulcer on the right lower leg. Both legs and scrotum were moderately (about 2 plus) edematous.

On admission, the hemoglobin was 12.0 gm. per cent, hematocrit 38 per cent, white blood count 14,400 with 3,456 bands, 8,640 neutrophils, 1,584 lymphocytes, and 864 monocytes: Urinalysis showed 1 plus proteinuria; red blood cells, 5-10, and white blood cells, 5-10/HPF. Urine studies also revealed 4 plus bilirubin and urobilinogen positive to 1:80 dilution. Sodium was 127 mEq; chloride, 93 mEq; potassium, 4.7 mEq; and CO₂ CP, 20 mEq.

Blood urea nitrogen and creatinine were 21 and 1.0 respectively. Two hour postprandial blood glucose was 87 mg. per cent. Liver function studies showed bilirubin 16.0 mg. per cent; with 10.8 mg. per cent direct; total serum protein was 5.4 mg. per cent with 2.9A/2.5G; alkaline phosphatase was 10 King-Armstrong Units; thymol flocculation, 1 plus; cepalin flocculation, 1 plus; SGOT, 126 U. The prothrombin time was 50 per cent.

Studies of right pleural effusion (1,700 cc. removed May 6, 1966) revealed 583,000 RBC/cmm; 1,750 WBC/cmm with 65 per cent polys and 35 per cent lymph; protein, 2,200 mg. per cent; glucose, 54 mg. per cent and amylase 109 U.

BACTERIOLOGICAL FINDINGS

Bacteriological studies revealed: Urine—light growth of *Klebsiella aerobacter*, *Proteus* and *Escherichia Coli*; sputum—hemophilic influenza and *Proteus*; foot and leg ulcer cultures—no growth. All smears and cultures (routine, fungi, and tuberculosis) of pleural effusions were negative. Cytology studies of pleural effusion were Class I.

Liver scan revealed questionably small liver, but with good uptake. Upper gastrointestinal series was interpreted as being normal except for a hiatal hernia. Liver biopsy revealed chronic passive congestion with superimposed anoxic necrosis.

Electrocardiograms performed during the hospitalization revealed (June 2, 1966) atrial fibrillation and nonspecific ST-T abnormalities, (June 7, 1966) supraventricular tachycardia and right bundle branch block, (June 8, 10 and 11, 1966) atrial fibrillation, nonspecific ST-T abnormalities and left ventricular "strain."

Following admission to the ward, the patient was continued on digitalis and diuretics. He was placed on appropriate antibiotics based on the results of cultures and sensitivity. Initially he was

believed to have had either alcoholic cirrhosis or pancreatic malignancy causing his clinical jaundice. However, all studies failed to confirm either of these diagnoses.

Throughout the hospital course, the patient was quite dyspneic. He remained afebrile and his jaundice regressed (bilirubin was about 6.0 at death). He developed a 25 per cent right pneumothorax following the thoracentesis on May 6, 1966. This progressed to better than 50 per cent pneumothorax, at which time chest tubes were inserted. Several chest films were obtained following the insertion of chest tubes which revealed complete expansion, but "diffuse parenchymal involvement of right lower lobe" remained unchanged. Subsequently, the patient was scheduled for bronchoscopy and scalene node biopsy. Despite a good diuretic response (decrease in weight from 163 to 139 lbs.), his dyspnea did not improve.

CONDITION DETERIORATES

On May 11, 1966 he began to deteriorate rapidly, becoming much more dyspneic and hypotensive. One observer mentioned that the entire posterior right chest was dull to percussion. The bronchoscopy examination which was scheduled that day was cancelled. Despite vasopressors, respiratory assistance and other measures, the patient expired at 6 p.m. on May 11, 1966.

Dr. Robert E. Tyson: "As is customary in these exercises, I will review the protocol briefly and point out some facts that occur to the clinician as he considers the illness of this patient, which was such a severe illness that it killed him in just six weeks.

"The practicing clinician often thinks of disease in terms of simple phrases. For example, if a patient presents in the office with painless hematuria, then the clinician immediately thinks of malignancy of the GU tract. On the other hand, if a patient complains of nocturnal diarrhea, the clinician thinks of diabetic enteropathy.

CHRONIC LESIONS

"As one reads this protocol, one finds several examples of similar phrases which cause the clinician to think of a specific entity. The first such phrase comes in the first paragraph when we note that the man had sores on his legs and feet for 27 years. Chronic suppurative lesions which have been present for years tend to make the physician think of amyloid disease, although this is an unusual condition.

"The next phrase we come to is gunshot wound of the right popliteal area, which immediately makes the internist think in terms of an arteriovenous fistula. There is nothing following this in the protocol to make us think that the patient did indeed develop high output failure, or other symptoms to suggest that an AV fistula was present. Those are just two red herrings that appeared in the first two paragraphs. I do not believe that the fracture of C-5 and C-6, which was treated with Crutchfield tongs in 1964, contributed significantly to his terminal illness.

"We find this patient coming to the hospital just six weeks before his demise complaining of dyspnea and orthopnea and having the classical findings of congestive heart failure with right pleural effusion. He was given prescriptions for digitalis and chlorthalidone, but failed to obtain either of the medications. He returned a fortnight later to the emergency room, and this time he complained of a significant new symptom—hemoptysis.

"Hemoptysis immediately makes the clinician think of a number of different diseases. Several years ago we would have thought first of tuberculosis or bronchitis or bronchiectasis. However, now when we see a patient with hemoptysis we think first of lung cancer, and immediately feel that that is the disease we should consider to be present until it has been proved to be absent. As all of you know, pulmonary infarction is commonly associated with hemoptysis, and it would certainly be another real consideration in a patient with congestive heart failure.

HEMOPTYSIS

"I learned today that not only did the patient have hemoptysis then, but he continued to exhibit hemoptysis throughout his hospital stay, suggesting that the etiological reason for his hemoptysis was a continuing process. A frequently-overlooked cause of hemoptysis is mitral stenosis. At a time when there were more people suffering from rheumatic heart disease and less people had lung cancer, mitral stenosis was a significant cause of hemoptysis.

"By this time, the patient had developed more edema, more signs of congestive heart failure, and there is a note that his leg lesions were infested with maggots. Suppurative gangrenous lesions are treated in many parts of the world with maggots as good therapy, so we shouldn't consider this complication with too much revulsion, since the maggots eat only the dead tissue which needs to

be debrided. In any event, they seem to be helpful.

"Returning to the protocol, we find that at this time the patient had developed jaundice. This is a sign which frequently causes the internist to lose sight of other symptoms present and consider this patient as a man with jaundice, rather than a man with heart disease. This could easily lead one further afield in this particular case. His chest films at that time show his heart to be growing larger, and show that his pleural effusion was increasing. The protocol gives no history helpful in ascertaining the cause of his jaundice and that he had not received a transfusion, had not been exposed to hepatitis, and he denied excessive alcohol intake.

NO TOBACCO USAGE

"High blood pressure was said not to have ever been present, making us wonder where his congestive heart failure came from. Next, we note a most unusual fact—it is recorded that this man did not smoke and had not smoked. This is, of course, most unusual in a 66-year-old Mississippian. I think this is a significant fact, because, as mentioned earlier, hemoptysis is so often the presenting symptom of lung cancer that we are really relieved to learn that this man didn't smoke. While this does not absolutely eliminate carcinoma of the lung from consideration, it certainly lessens its likelihood.

"Physical examination at this time showed a slow pulse and a normal blood pressure. He did not have fever throughout his stay in the hospital. Atrial fibrillation was present and confirmed by the electrocardiogram. Reading next of a diastolic murmur in a patient with hemoptysis and atrial fibrillation leads to the logical conclusion that mitral stenosis must be suspected. Other physical findings of mitral stenosis would make us feel more secure.

"His liver was noted to be enlarged and no notation is made of firmness or nodularity. The ulcerations which had been present for 27 years were still present.

URINALYSIS FINDINGS

"His urinalysis showed only a 1+ proteinuria, tending to rule out the nephrotic syndrome as a cause of his anasarca and, hence, tending to rule out amyloid disease of the kidney. The urine examination showed both bilirubin and urobilinogen to be present, and, as all of you know, the finding of urobilinogen in the urine points out that complete biliary obstruction is not present. Thus, the clinicians caring for the patient were able to rule

out carcinoma of the pancreas, which they had initially feared to be present in a 66-year-old man with jaundice, and, certainly, the most likely cause of jaundice in a 66-year-old man from a statistical standpoint would be carcinoma of the pancreas. The liver function studies showed a marked increase in the bilirubin in both conjugated and free bilirubin, which is a classical finding of hepatocellular jaundice. His serum proteins, with a normal albumin and normal globulin, showed that cirrhosis was not causing his anasarca.

"Generally speaking, when one sees a patient with extensive edema, one wonders if the edema is cardiac in origin, renal in origin, or hepatic in origin. The renal origin of the lesion and the hepatic origin have been virtually ruled out by the above tests. The other liver function studies ruled out hepatitis as a consideration.

"The studies of the pleural effusion are equivocal. A specific gravity being done on this fluid would have been a most helpful study to decide whether this was an exudate or a transudate. The protein was less than 3 gm., making us think that the fluid was probably a transudate, but the rich cellular constituents make one think more of an exudate. The cell count is suggestive of a pleurisy with effusion, such as is seen following pneumonia or with beginning empyema, although a pulmonary embolus could certainly cause the findings. These are not the findings with pulmonary tuberculosis, in which most of the cells are lymphocytes.

LIVER SCAN

"The liver scan showed a questionably small liver, and this tends to rule out extensive metastatic disease in the liver as a cause of his jaundice. The upper GI series helped to rule out pancreatic carcinoma as there was no deformity of the duodenal loop. The liver biopsy showed chronic passive congestion with a superimposed anoxic necrosis, and this fits perfectly with the other liver tests, indicating the main disease to be hepatocellular jaundice, rather than obstructive jaundice. Certainly, this is not hemolytic jaundice, since the direct-acting bilirubin is greatly elevated.

"I have reviewed his electrocardiograms during this illness, and they were not helpful. The electrical axis of the heart was to the left in all tracings except for the two days, May 7 and May 8, at which time the pattern was that of a right bundle branch block. The electrocardiogram does not indicate right ventricularity, as one would expect, with right heart failure, as is seen in mitral stenosis.

"The patient's dyspnea grew worse following thoracentesis, and since he had a pneumothorax, this is not unexpected. Films following the thoracentesis revealed diffuse parenchymal involvement of the right lower lobe, again raising the question of pulmonary embolus, pneumonia, or possibly tumor.

"In summary, then, this is a 66-year-old Negro man who had chronic ulcerative lesion for years and then developed an illness characterized by congestive heart failure and dyspnea, which caused his death within six weeks while he developed severe hepatocellular jaundice, hemoptysis, and a right-sided lung lesion. May we see the X-rays now?"

PRIOR CHEST FILM

Dr. Robert D. Sloan: "This is a routine chest film taken back in 1964 during one of his clinic visits. At that time the patient was 64 years old, and as far as I am concerned this is a perfectly normal film for a man of that age. Now this is the baseline for the way the chest film appears when he first came in the emergency room. In April 1966 the heart was moderately enlarged with a nonspecific pattern of enlargement to the silhouette. There was a pleural reaction at the right base, some coarsening of the markings and certainly there is nothing on this film to argue against this being a cardiac enlargement with pulmonary congestive changes and pleural effusion.

"The next film was taken on April 30, the second emergency room visit. I mention now that the size of the heart appears to stay just about the same during the rest of his life but at this time it is quite apparent that there is a lot more pleural fluid than there was on the previous film.

"A film on May 6 after a tap shows an expected pneumothorax and fluid at the base. Also, there is this sort of consolidation of the lower lobe. It is true that in a pneumothorax where the lung collapses, the lung may get more opaque. For the degree of collapse seen here this is just too dense, so I think that you would have to assume that there was some parenchymal pathology there now. Whether it is a pneumonitis of some sort or whether he has had a pulmonary infarction, I don't think there is any way you can say from the film.

SUBSEQUENT X-RAYS

"The next film is a day or two later. I am a little uncertain as to the nature of an area at the lung base, whether it is air trapped beneath the base of the lung or whether in the tapping they

might have gotten beneath the diaphragm. For a day or two these films showed this peculiar pattern and then it disappeared. The next film is May 2 after they put in chest tubes. The lung had re-expanded fairly well but again you see this opacification in the lower portion of the right lung. The final portable film taken not too long before death shows that there is a second parenchymal density lying at a somewhat higher level. There is another area that worried me, which again made me consider the possibility of infarcts.

"A GI series was done and was essentially normal. A film of the right foot shows that he had tremendous loss of bony substance at the ends of the metatarsals. They come down to a point and the 4th and 5th toes are practically gone. This is more the appearance of a neurotrophic situation in the foot. The left foot looked perfectly normal. A view of the right leg shows a gunshot injury, and it would be interesting to speculate that there was a lot of nerve damage there, but there is nothing in the protocol to indicate his neurologic status."

Physician: "Is that a chronic osteomyelitis or what?"

Dr. Sloan: "No, he might have had an infection but there is nothing at this time on the film to permit a diagnosis of active osteomyelitis. He may well have had it in the past. I am sure he had a fracture at the time of his gunshot injury and he might well have had superimposed infection."

Dr. Tyson: "Thank you, Dr. Sloan. I think on the basis of the films I would certainly include in my final diagnosis pulmonary emboli as a part of his terminal illness. We are still left to decide the original cause of his disease. It is always attractive to think of an unusual disease at the CPC, and one could think of amyloid disease of the liver and amyloid disease of the heart. Characteristically, amyloid disease of the liver doesn't derange liver functions appreciably, and these people usually do not become jaundiced. It is interesting to note that people with amyloid disease of the liver frequently die following liver biopsy for one reason or another, either bleeding or some complication above the diaphragm, but with this man's historical features, I don't believe he had amyloid."

"A neoplasm of the lung causing those parenchymal changes would be thinking in terms of the disease that would kill this man in six weeks, and I judge this is what the physicians taking care of this man on the ward were thinking when they planned to do a bronchoscopy and scalene node biopsy. We don't have much evidence for pulmonary neoplasm, and this is particularly true in a man who never smoked."

"So, finally, we are left with a case of a man with hemoptysis and a large liver, and the question that immediately comes up is—can congestive heart failure derange liver functions this seriously? I don't know the answer, and I don't know where one can find the answer. This is one of those things that has never been clearly documented and set down in a book for an easy answer. I have seen at least one patient in this hospital with severe mitral stenosis and a large, hard liver, who is terribly jaundiced most of the time. Therefore, my diagnosis on this patient is mitral valvular disease with right heart failure, complicated by cardiac cirrhosis. Terminally, he had right-sided and also probably left-sided pulmonary infarctions."

"Someone in the audience suggested that the murmur was higher than one would expect it to be with mitral stenosis."

"The other valvular disease that could cause such liver disorder is tricuspid insufficiency. This is said to be an extraordinarily rare disease, and I am unable to comment on it."

AUTOPSY REPORT

Dr. Walter S. Gilmer: "It might serve a useful purpose to summarize this case initially by saying that in our estimation it is a case of liver disease secondary to cardiac disease which in turn was secondary to both acute chronic and pulmonary disease. As it is, we will present evidence for acute and chronic pulmonary disease, for heart disease, acute and chronic, secondary to the pulmonary disease and finally evidence of long-standing liver damage plus more acute hepatocellular changes, both of which we attribute to the heart disease."

"This man was a fairly well developed Negro, 5 feet, 8 inches tall, weighing about 130 lbs. He was pretty icteric and there were ulcerated lesions of the penis, scrotum, and on the soles and heels. These have been alluded to as stasis ulcers, and that probably is a satisfactory designation. On opening the thoracic cavities, there was a remarkably thickened right pleura which the prosector likened to the rind on a melon. This was clearly an old process, but there was an effusion which presumably was related to a more acute process which was in fact a massive infarct of the entire right lower lobe."

"The lung weighed 1,330 gm. There was a thrombus in the major artery to the right lower lobe which, as I said, had caused a total infarction of the right lower lobe which I would estimate to be at least three weeks old. I feel that the bloody effusion was due to this infarct."

"There was a more recent infarct in the anterior portion of the right middle lobe associated with thrombosis of the vessel to that segment. There were emphysematous blebs at the apex, one of which was ruptured and probably accounted for the pneumothorax.

"The parenchyma of the lung was in all areas somewhat increased in density or consistency. This was true in the left lung also. The left lung weighed 490 gm., there were also emphysematous changes and a small infarct peripherally in the left lower lobe.

"Microscopically, the existence of emphysema was confirmed. The infarct in the right lower lobe as you can see has caused a total consolidation of this lung, a diffusely hemorrhagic alteration throughout and obviously since the structure of the lung is pretty well lost in these microscopic views one feels that three weeks is a logical age to assign to this infarct. In addition there is a good bit of pulmonary fibrosis elsewhere, as well as some thickening of the small pulmonary arteries and arterioles which we feel accounted for a significant degree of obstruction in the lesser circulation.

"The heart weighed 540 gm., and the right ventricle was 6-7 mm. in thickness—2½ to 3 times normal. Also, there was dilatation of all chambers of the heart and these alterations were not associated with any valvular or coronary artery disease. So I think it is fairly clear that this man had chronic cor pulmonale with terminal acute right heart failure.

CONGESTION IN LIVER

"The liver weighed only 1,250 gm. and Dr. David R. Steckler at the time of autopsy did not consider it to be enlarged, but with a significant and obvious central lobular congestion.

"Microscopically there was clearly a very marked degree of central congestion with some obvious collapse of the reticulum as a result of atrophy and destruction of the liver cells. This is not the pattern of a posthepatic type of cirrhosis or a portal cirrhosis but rather the result of chronic congestive changes with, I think, terminal acute anoxic changes in the hepatic cells.

"Earlier today I was discussing this liver with Dr. Joel G. Brunson and Dr. Edward A. Gall and Dr. Gall afforded this interpretation and Dr. Brunson referred to it as cyanotic hepatomegaly which is indeed an attractive term. In any case there is obviously a good bit of liver cell unrest with cellu-

lar alterations of both regenerative or reactive and degenerative character.

"Therefore, this much seems clear, and I will repeat my original statement. This man had chronic pulmonary disease with fibrosis, vascular alterations and emphysema and as a result of that he had developed right ventricular hypertrophy. Undoubtedly over the years there had been some liver change of congestive nature as the result of increased venous pressure in the liver, then when he sustained a massive pulmonary infarct this put an additional and acute burden upon the heart with resultant right ventricular failure and acute anoxic changes in the liver. These changes in association with a massive necrosis and hemorrhage in the lungs were, we feel responsible for the jaundice, and of course the pleural bloody effusion would contribute further to this. Then as this condition resolved or subsided, and he was treated for his congestive failure the jaundice began to subside also. It is presumed that the leg veins were the source of the emboli."

CARDIOVASCULAR ASPECTS

Physician: "Did he have venous insufficiency of the lower extremity?"

Dr. Gilmer: "I don't know. These have been called stasis ulcers and certainly with multiple injuries to his legs and also with the chronic infection I suppose that he did have venous insufficiency."

Physician: "Were there any valvular lesions in the heart?"

Dr. Gilmer: "The valvular measurements as far as I can determine were certainly within normal limits. As far as we know he had no reason for left ventricular hypertrophy on the basis of systemic hypertension, but it is a rather sad commentary that while this man was seen on many occasions over a period of years there was never a blood pressure recording in his chart until 1964 and that was 150/90."

DIAGNOSTIC DIFFICULTIES

Dr. Tyson: "In regard to the bilirubin elevation, I would like to point out that this is not a particularly helpful laboratory test in making the diagnosis of pulmonary embolus. Several years ago, the pathologists stated that 90 per cent of the time pulmonary embolus was diagnosed, it was diagnosed at autopsy; and, even more importantly, they stated that 50 per cent of the time pulmonary embolus was diagnosed ante mortem, it was diagnosed incorrectly. One sees at once that

this is a difficult condition to diagnose. In our modern age of technology, one might ask—what laboratory aids do we have for diagnosing this disease? In years gone by, bilirubin was used but it was the indirect fraction that went up several days after infarction, not the magnificent elevation of conjugated bilirubin that this patient exhibited. This test appears to be totally useless as a diagnostic aid at this time. Another test that has been tried is the lactic dehydrogenase (LDH) test, and many people feel that this is a helpful test. It appears to me that the most useful, and certainly the most diagnostic test, is going to be the pulmonary arteriogram, and I would like to ask Dr. Sloan to comment on this test and its use in diagnosing pulmonary embolus.”

Dr. Sloan: “I think it will be probably the best

method we have to date to show a blocked artery.”

Dr. Tyson: “Pulmonary scans have been less than ideal in helping with this problem. It was hoped for a time that they would be helpful, but they have a number of shortcomings.

“The other comment I would wish to make at this time is what it is extremely unusual to see a man with cancer of the lung if he had never smoked, and it would be even more unusual to see a man with chronic lung disease that has never smoked. Women from families susceptible to chronic obstructive pulmonary emphysema occasionally have emphysema in the absence of a smoking history, but it is extraordinarily rare to see chronic lung disease in a man who does not smoke.” ★★★

2500 N. State St. (39216)

TITHE FOR TAT

Concluding the offertory prayer, the minister sternly admonished the congregation: “And now, brethren, let us all give in accordance with our recent declarations on Form 1040.”

Radiologic Seminar LX: Drip Infusion Nephrotomography

ROBERT P. HENDERSON, M.D.

Jackson, Mississippi

AFTER A KIDNEY LESION is suspected or demonstrated on an excretory urogram, drip infusion nephrotomography is the next logical, safe and relatively simple test requiring no special equipment other than that used for body section radiography.

The reactions with the high dosage of 100-150 cc. of 50 per cent Hypaque are no more than with conventional excretory urography. Only five to seven minutes are required to infuse the medium which is diluted with equal quantity of 5 per cent dextrose. The flooding of the vascular, glomerular and tubular elements increases the density of the kidney parenchyma which lasts for at least 30 minutes allowing time for many careful tomograms of the kidney region. The body section radiography further enhances the detail of the nephrographic effect.

Nephrotomography has its greatest usefulness in the differentiation of a cyst from a tumor. The high degree of accuracy in the differentiation of cyst from tumor has been established in several large series of cases, the overall accuracy being reported from 90 to 95 per cent.

The problem of a tumor associated with a cyst has apparently been overstated. Levine¹ *et al.* reviewed 1,007 cases of renal cysts and tumors. There were only ten cases with both a cyst and a tumor in the same kidney, and in eight of these cases, the cyst and tumor were not closely related. In one case alone there was a tumor at the base of the cyst.

Because of the expanse of the contrast media and the time required for the examination, this procedure cannot be used as a routine substitute for excretory urography.

Listed below are various renal lesions and clinical situations in which nephrotomography has

been employed with varying degrees of accuracy.

1. Simple renal cyst. This appears as a smooth, thin-walled radiolucent and sharply demarcated lesion.

2. Tumor. A typical tumor is a mottled opaque mass occasionally denser than normal kidney parenchyma.

3. Congenital anomalies. Outlining the entire kidney parenchyma allows accurate diagnosis of the various fusion deformities, ectopias and even polycystic kidneys.

4. Normal variants. Variation in the shape of the kidney may be a source of concern easily resolved with opacification of the kidney parenchyma.

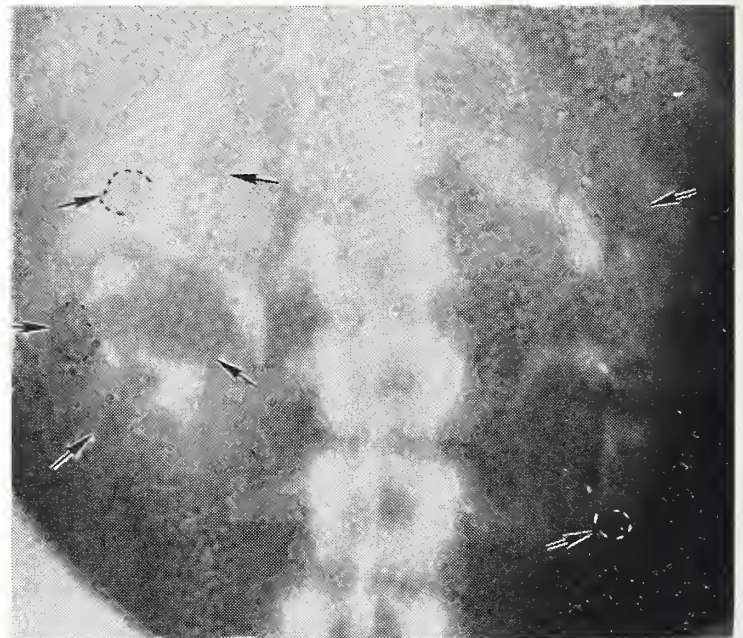


Figure 1. Polycystic kidneys are suspected on the excretory urogram due to the calyceal deformities, but the nephrotomogram shows multiple cysts of varying size in both kidneys. The arrows are shown pointing to a few of the many cysts.

5. Renal sinus lipomatosis. Normally a thin layer of loose fatty tissue envelopes the pelves and calyces. Age, obesity, and renal disease resulting in the loss of kidney parenchyma may cause ex-



Figure 2. A bilateral irregular collection of fat is well outlined on the original nephrotomogram. On this illustration, arrows show the extent of the defect on the left with there being more involvement on the left than the right.

cessive accumulation of fat around the pelvocalyceal system. Minor collections are the rule, but when there is a marked collection, there will be a "squeezed" appearance of the infundibular portions of the calyces and inverted calyces. This appears on the excretory urogram as a confusing and often unsatisfactory study. However, nephrotomography shows the marked contrast between the fatty tissue and the dense kidney parenchyma.

6. Renal carbuncle and infarction. Such lesions may be demonstrated as a lucent defect.

7. Pyelonephritis and other chronic inflammatory and vascular lesions. The small scarred kidney can be studied better by nephrotomography.

8. Renal trauma. More information as to the degree of injury may be secured, particularly when the intravenous pyelogram is unsatisfactory.

9. Adrenal tumors. These may opacify if large enough. Apparently this opacification is due to the vascularity of the tumor and the high concentration of media in all parts of the body.

10. Excretory urograms. The high dose and associated diuresis result in excellent visualization of the calyces, pelves, ureters and bladder which is usually as good if not superior to the retrograde pyelogram. ★★★

1151 N. State St. (39201)

REFERENCES

1. Levine, S. R.; Emmett, J. L., and Woolner, L. B.: Cyst and Tumor Occurring in the Same Kidney, J. Urol. 91:8-9, 1964.
2. Chynn, K. Y., and Evans, J. A.: Nephrotomography in Differentiation of Renal Cyst from Neoplasm: Review of 500 Cases, J. Urol. 83:21-24, 1960.
3. Faegenburg, D.; Bosnick, M., and Evans, J. A.: Renal Sinus Lipomatosis: Its Demonstration by Nephrotomography, Radiology 83:987-997, 1964.
4. Feldman, M. I.; Goade, W. J., and Seife, I.: Large Volume Contrast Nephrotomography, J. Urol. 64: 196-198, 1965.
5. Greene, L. F.; Witten, D. M., and Emmett, J. L.: Nephrotomography in Urologic Diagnosis, J. Urol. 91:184-189, 1964.
6. Schenker, B.: Drip Infusion Pyelography, Radiology 83:12-21, 1964.
7. Witten, D. M.; Greene, L. F., and Emmett, J. L.: An Evaluation of Nephrotomography in Urological Diagnosis, Am. J. Roentgenol. 90:115-123, 1963.

BURN, BUREAUS, BURN!

The British burned Washington in 1812, but what have they done for us lately?

Motor Vehicle Accidents: An Unsolved Problem

PAUL S. DERIAN, M.D.

Jackson, Mississippi

AUTOMOBILE ACCIDENTS are the fourth leading cause of death in America. Of 100,000 accidental deaths in America in 1965, 50,000 were attributed to the motor vehicle. In the state of Mississippi to May, 1966, over 225 people died. In a similar period of time in 1965, 150 Mississippians were killed. Fifty-five thousand injured patients are hospitalized today from auto accidents.

Auto accidents exact a phenomenal financial toll. In 1960, insurance costs were estimated at 2 billion dollars; in 1961, claims for injuries had risen 3 per cent. Property damage yearly extends to 2½ billion dollars; wage losses are 1.8 billion dollars per year, and medical expenses are over 200 million dollars.

The accident rate of individuals over 65 is twice the average of all other drivers. In 55 per cent of all fatal accidents, drinking is a factor. Only 25 per cent of the nation's cars are inspected once or twice a year. The quality of the inspections continues to be substandard. Complacency exists with the examiner and the examinee. A driver is free to have a license in more than one state. If one license is revoked for any infraction, driving is not restricted.

In some states there are no contraindications to driving, although an individual may be under a physician's care and medicated with antihistamines, barbiturates, stimulants, tranquilizers, or narcotics. A legally blind individual or one that is committed to a psychiatric unit does not have his or her driver's license suspended or reviewed.

Under Section 8093, Mississippi Code of 1942, Annotated, the commissioner of the Department

of Public Safety (Highway Patrol) is authorized to deny a driver's license "to any person who would not be able, by reason of physical or mental disability in the opinion of the commissioner or other person authorized to grant operator's license, to operate a motor vehicle on the highways with safety. . . ." Under Section 8107, the commissioner may suspend such license without prelimi-

Sound programs for the reduction of highway deaths do not exist in America, maintains the author, who points out that automobile accidents are the fourth leading cause of death. He challenges physicians to be leaders in seeking accident reduction by the means of public information, education, research, stimulating interest in support of citizens' groups, emergency care of the patient, training of paramedical forces, maintaining adequate traffic accident records, and insisting upon sounder engineering principles in the vehicle.

nary hearing when the licensee is deemed incompetent to drive a motor vehicle.

To assist the commissioner, the state medical association established a Committee on Medical Aspects of Driver Limitation, a nine member, multi-discipline body which includes representation of general surgery, orthopedic surgery, medicine, ophthalmology, otolaryngology, neurology, and psychiatry. The committee has established a system of mandatory examination by a physician for certain licensees or applicants for licensing and has devised a standard reporting form.

Chairman, Mississippi Committee on Trauma, American College of Surgeons.

Automobile industries and their suppliers have not fully assumed total responsibility in auto safety. Radio and television commercials continue to blare with thoughts of the "car rebellion" featuring a high speed car with special tires making a curve with screeching brakes. The silence of safety measures is awesome. Only with the threat of federal and state legislative intervention or increased litigation has a more aggressive role in safety been taken by the car manufacturer.

Inadequate licensing procedures, shammed inspections, lack of safety standards, failure of local law enforcement, and an apathetic public have added to the carnage.

Medical centers must assume increased leadership in the field of trauma. Trauma centers or wings with a multi-discipline approach should be sought. A specific course in trauma with all specialists taking an active role should be taught.

What can be done? Medical care must begin with the prevention of injury and continue to the final rehabilitation of the patient. What measures can the physician consider in assuming his responsibilities?

PHYSICIAN'S ROLE

1. Inform the patient of precautions to be taken when medications are given. Advise restriction of driving when tranquilizers, sedatives, antihistamines, stimulants, or narcotics are given.

2. Re-evaluate office and hospital emergency facilities.

3. Instruct paramedical forces (police, firemen, and ambulance drivers) in the handling of the injured patient.

4. Insist that law enforcement agencies be supported.

5. Establish local criteria based on national standards for a high school driver's training program. (Although the program is not as effective as previously indicated, benefits can be derived.)

6. Teach and stress safety in the young and aged drivers.

LEGISLATIVE ACTION

7. Demand legislative action for:

- a. Re-examination of drivers over the age of 65.

- b. Sobriety testing.

- c. Better roads.

- d. Strengthen the existing laws and introduce new laws for highway safety.

- e. Increase the state police force.

- f. Enforcement of a realistic inspection program.

- g. Establishment of safety measures for cars being sold (new and old).

The physician is faced with pyramiding responsibilities in every field of medicine, medicare, and a rapid medical pace. Sound programs for the reduction of highway deaths do not exist in America. The physician must be a leader in seeking accident reduction by the means of public information, education, research, stimulating interest in support of citizens' groups, emergency care of the patient, training of paramedical forces, maintaining adequate traffic accident records, and insisting upon sounder engineering principles in the vehicle. Unless an active role in this crisis is taken, 1967 will be a banner year for death on the highways. ★★★

2500 North State Street (39216)

ECONOMIC SECURITY PROGRAM

The young thing in her first year of nurse training was asked by the instructor to define the term, "practical nurse."

"Simple," she said with a smile. "It's a nurse who marries a wealthy man."



TRUSTEES, COUNCILS, AND COMMITTEES

■ BOARD OF TRUSTEES

JOHN B. HOWELL, JR., Canton, Chairman (1968)
LAMAR ARRINGTON, Meridian, Vice Chairman (1968)
C. D. TAYLOR, JR., Pass Christian, Secretary (1969)
LYNE S. GAMBLE, Greenville (1967)
JOSEPH B. ROGERS, Oxford (1967)
J. T. DAVIS, Corinth (1967)
MAL S. RIDDELL, JR., Winona (1968)
W. E. MOAK, Richton (1969)
G. SWINK HICKS, Natchez (1969)

■ COUNCIL ON BUDGET AND FINANCE

J. T. DAVIS, Corinth, Chairman (1968)
DANIEL L. HOLLIS, Biloxi (1967)
GEORGE D. PURVIS, Jackson (1969)

■ EDITORIAL COUNCIL

W. MONCURE DABNEY, Crystal Springs, Editor (1969)
GEORGE H. MARTIN, Vicksburg, Associate Editor (1968)
THOMAS W. WESSON, Tupelo, Associate Editor (1967)

■ COUNCIL ON MEDICAL EDUCATION

E. LEROY WILKINS, Clarksdale, Chairman (1967)
W. O. BARNETT, Jackson (1968)
DENNIS E. WARD, Corinth (1969)

■ COUNCIL ON CONSTITUTION AND BY-LAWS

E. LEROY WILKINS, Clarksdale, Chairman (1969)
JOHN B. HOWELL, JR., Canton (1967)
RAYMOND S. MARTIN, Jackson (1968)

■ COUNCIL ON LEGISLATION

W. E. LOTTERHOS, Jackson, Chairman (1967)
JOHN G. EGGER, Drew (1968)
JAMES O. GILMORE, Oxford (1968)
FRANK M. DAVIS, Corinth (1968)
PAUL B. BRUMBY, Lexington (1967)
LAMAR ARRINGTON, Meridian (1967)
A. T. TATUM, Petal (1969)
A. V. BEACHAM, Magnolia (1969)
ELDON L. BOLTON, Biloxi (1969)

■ JUDICIAL COUNCIL

E. LEROY WILKINS, Clarksdale, Chairman (1968)
R. L. WYATT, Holly Springs (1968)
THOMAS N. BRADDOCK, JR., West Point (1968)
PAUL B. BRUMBY, Lexington (1969)
WILLIAM B. WIENER, Jackson (1969)
OMAR SIMMONS, Newton (1969)
A. T. TATUM, Petal (1967)
G. SWINK HICKS, Natchez (1967)
W. J. WEATHERFORD, Pascagoula (1967)

■ COUNCIL ON MEDICAL SERVICE

GUY T. VISE, Meridian, Chairman (1968)
GEORGE F. ARCHER, Greenville (1969)
JAMES O. GILMORE, Oxford (1969)
JACK M. SENTER, Belmont (1969)
PAUL B. BRUMBY, Lexington (1968)
JOHN G. CADEN, JR., Jackson (1968)
T. E. ROSS, Hattiesburg (1967)
R. J. FIELD, JR., Centreville (1967)
WESLEY L. MCFARLAND, Bay St. Louis (1967)

■ COUNCIL ON SCIENTIFIC ASSEMBLY

JAMES L. ROYALS, Jackson, Chairman
SETH H. BARRON, Columbia, EENT
PAUL B. BRUMBY, Lexington, GP
WILLIAM E. WEEMS, Laurel, Medicine
CHESTER H. LAKE, Jackson, Ob-Gyn
J. LEE OWEN, Jackson, Pediatrics
SHELBY W. MITCHELL, Ellisville, Preventive Medicine
GEORGE E. GILLESPIE, Jackson, Surgery

99th Annual Session

Mississippi State Medical Association
May 15-18, 1967

THE MISSISSIPPI GULF COAST becomes the state's medical Mecca May 15-18 when the 99th Annual Session of the state association convenes at Biloxi. Six general sessions featuring programs of the seven scientific sections, 11 specialty societies, five alumni occasions, and a dozen special and fraternal meetings will be compressed into the four day conclave. Headquarters is the modernized and refurbished Buena Vista Hotel and Motel.

Dr. James T. Thompson of Moss Point, association president, will address the opening session in the House of Delegates on Monday, May 15. The highlight guest speaker will be Dr. Milford O. Rouse of Dallas, Texas, president-elect of the American Medical Association. House Speaker Howard A. Nelson of Greenwood and Vice Speaker William E. Lotterhos of Jackson said that reports and resolutions will be presented at the opening meeting, also. Final action will come Thursday, May 18, along with election of 1967-68 officers, Trustees, and council members.

At the final session, Dr. Temple Ainsworth of Jackson will be inaugurated 1967-68 president. The Scientific Assembly will meet Tuesday, Wednesday, and Thursday morning, according to Dr. James L. Royals of Jackson, chairman of the Council on Scientific Assembly. He said that specialty society meetings will be sprinkled over the four day period.

The Woman's Auxiliary will conduct its 44th Annual Session May 15-17, according to Mrs. J. Gordon Dees of Jackson, president of the ladies' group. Mrs. David L. Clippinger of Crystal Springs is president-elect and will take the Auxiliary helm for the 1967-68 year.

Mrs. F. C. Minkler, Jr., of Pascagoula is general chairman of the Auxiliary meet, and Mrs. S. J. Simmons of Pascagoula is co-chairman.

Four medical and one general alumni groups will meet. On tap are functions for Ole Miss, Ten-

nessee, Tulane, Vanderbilt, and Millsaps. Social highlight will be the Caribbean Holiday A-Go-Go on Wednesday evening.

Technical and scientific exhibits will be in the Buena Vista with all major scientific and business meetings in adjacent meeting halls.

OFFICIAL CALL

To all members of the Mississippi State
Medical Association

The 99th Annual Session of the Mississippi State Medical Association is called to meet at Biloxi, Mississippi, on Monday, May 15, 1967, pursuant to Article V of the constitution. The House of Delegates will be convened at 9 o'clock in the morning at the Hotel Buena Vista.

The Scientific Assembly, consisting of the general sessions will meet during the period May 16-18, 1967.

No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

JAMES T. THOMPSON
PRESIDENT

JAMES L. ROYALS
SECRETARY-TREASURER

The Buena Vista is accepting and confirming reservations, Dr. Royals said, and he urged members to communicate with the hotel early. Even with the new addition to the beach motel, there will not be a sufficient number of headquarters facility rooms to accommodate registrants. Arrangements have been made with nearby hotels and motels for additional housing.

STATE OFFICERS 1966-67



DR. THOMPSON

PRESIDENT
JAMES T. THOMPSON, M.D.
Moss Point

PRESIDENT-ELECT
TEMPLE AINSWORTH, M.D.
Jackson

SECRETARY-TREASURER
JAMES L. ROYALS, M.D.
Jackson



DR. AINSWORTH

VICE PRESIDENTS	ARTHUR E. BROWN, M.D., Columbus GEORGE E. GILLESPIE, M.D., Jackson LEO O. STEWART, M.D., Pascagoula
EDITOR	W. MONCURE DABNEY, M.D., Crystal Springs
ASSOCIATE EDITORS	THOMAS W. WESSON, M.D., Tupelo GEORGE H. MARTIN, M.D., Vicksburg
SPEAKER	HOWARD A. NELSON, M.D., Greenwood
VICE SPEAKER	WILLIAM E. LOTTERHOS, M.D., Jackson
AMA DELEGATES	J. P. CULPEPPER, JR., M.D., Hattiesburg HOWARD A. NELSON, M.D., Greenwood
EXECUTIVE SECRETARY	ROWLAND B. KENNEDY, Jackson
ASSISTANT EXECUTIVE SECRETARY	CHARLES L. MATHEWS, Jackson

THE BOARD OF TRUSTEES

JOHN B. HOWELL, JR., M.D., Canton, Chairman
LAMAR ARRINGTON, M.D., Meridian, Vice Chairman
C. D. TAYLOR, JR., M.D., Pass Christian, Secretary
LYNE S. GAMBLE, M.D., Greenville
JOSEPH B. ROGERS, M.D., Oxford
J. T. DAVIS, M.D., Corinth
MAL S. RIDDELL, JR., M.D., Winona
W. E. MOAK, M.D., Richton
G. SWINK HICKS, M.D., Natchez

LIVING PAST PRESIDENTS

1940-1941	WILLIAM H. ANDERSON, M.D., Booneville
1941-1942	A. STREET, M.D., Vicksburg
1943-1944	E. LEROY WILKINS, M.D., Clarksdale
1948-1949	R. B. CALDWELL, M.D., Baldwyn
1949-1950	B. B. O'MARA, M.D., Biloxi
1950-1951	B. S. GUYTON, M.D., Oxford
1951-1952	JAMES GRANT THOMPSON, M.D., Jackson
1952-1953	LAMAR ARRINGTON, M.D., Meridian
1953-1954	M. Q. EWING, M.D., Amory
1955-1956	S. LAMAR BAILEY, M.D., Kosciusko
1956-1957	H. C. RICKS, M.D., Jackson
1957-1958	HOWARD A. NELSON, M.D., Greenwood
1958-1959	GUY T. VISE, M.D., Meridian
1959-1960	STANLEY A. HILL, M.D., Corinth
1960-1961	G. SWINK HICKS, M.D., Natchez
1961-1962	LAWRENCE W. LONG, M.D., Jackson
1962-1963	C. P. CRENSHAW, M.D., Collins
1963-1964	JOHN G. ARCHER, M.D., Greenville
1964-1965	OMAR SIMMONS, M.D., Newton
1965-1966	EVERETT CRAWFORD, M.D., Tylertown

ACTIVITIES CALENDAR

REGISTRATION

General registration for the Scientific Assembly and House of Delegates will be located in the Hurricane Foyer of the Buena Vista Hotel. No person will be admitted to any activity of the annual session without first registering. The Secretary's Office will be located in Rooms 142-144. Hours of registration will be 8:00 a.m. to 5:00 p.m., May 15-17, Monday, Tuesday, and Wednesday, and 8:00 a.m. to 2:00 p.m. on May 18, Thursday.

SUNDAY, MAY 14, 1967

- 2:30 p.m. Miss. Association of Pathologists, Gold Room Center
- 6:30 p.m. Miss. Association of Pathologists, fellowship hour and banquet, Poolside Room

MONDAY, MAY 15, 1967

- 7:30 a.m. Mississippi Commission on Hospital Care, Fiesta Room
- 9:00 a.m. House of Delegates, Fountain Terrace
- 9:00 a.m. Miss. Association of Pathologists, Gold Room Center
- 11:00 a.m. American College of Surgeons, Miss. Chapter, Hurricane Room E
- 12:00 noon Miss. Urological Association, luncheon, Sun Room
- 12:00 noon American College of Surgeons, luncheon, Poolside Room
- 1:30 p.m. American College of Surgeons, Hurricane Room E
- 2:00 p.m. Reference Committee on Reports of Officers and Board of Trustees, Fountain Terrace
- 2:00 p.m. Reference Committee on Miscellaneous Business, Gold Room Center
- 3:00 p.m. Council on Constitution and By-Laws, Fiesta Room
- 3:30 p.m. Reference Committee on Medical Practices, Gold Room South
- 4:30 p.m. Ole Miss Medical Alumni, business meeting, Gold Room Center
- 7:00 p.m. Ole Miss Medical Alumni, fellowship hour and patio buffet, Motel Pool Area

TUESDAY, MAY 16, 1967

- 7:30 a.m. Woman's Auxiliary Pre-convention Executive Board, breakfast, Gold Room Center
- 7:30 a.m. Committee on Medicine and Religion, breakfast, Fiesta Room
- 7:30 a.m. American College of Ob-Gyn, breakfast, Sun Room
- 9:00 a.m. Woman's Auxiliary, general session, Gold Room South
- 9:00 a.m. General Scientific Session, Hurricane Room E

- 11:00 a.m. Miss. Society of Anesthesiologists, Card Room
- 11:45 a.m. International College of Surgeons, luncheon, Poolside Room
- 12:00 noon Miss. Society of Anesthesiologists, luncheon, Gold Room Center
- 12:00 high Flying Physicians Association, luncheon, Sun Room
- 12:00 noon Fifty Year Club, luncheon, Fiesta Room
- 2:00 p.m. General Scientific Session, Hurricane Room E
- 5:30 p.m. Vanderbilt University Medical Alumni, fellowship hour, Poolside Room
- 6:30 p.m. University of Tennessee Medical Alumni, fellowship hour and banquet, Fountain Terrace
- 7:00 p.m. The Tulane University Medical Alumni, fellowship hour and banquet, Sun Room

WEDNESDAY, MAY 17, 1967

- 7:30 a.m. Millsaps Alumni, breakfast, Gold Room Center
- 7:30 a.m. Past Presidents, MSMA, breakfast, Poolside Room
- 8:00 a.m. Past Presidents, Woman's Auxiliary, breakfast, Sun Room
- 9:00 a.m. General Scientific Session, Hurricane Room E
- 11:30 a.m. Miss. Society of Internal Medicine, luncheon, Sun Room
- 12:00 noon Woman's Auxiliary, luncheon, Fountain Terrace
- 12:00 noon Miss. Academy of General Practice, luncheon, Gold Room South
- 1:30 p.m. Miss. Psychiatric Society, Fiesta Room
- 1:30 p.m. Nominating Committee, Gold Room Center
- 2:00 p.m. General Scientific Session, Hurricane Room E
- 3:00 p.m. Woman's Auxiliary Post-convention Executive Board, Card Room
- 4:30 p.m. Miss. Diabetes Association, Hurricane Room E
- 5:00 p.m. Miss. Diabetes Association, fellowship hour, Poolside Room
- 5:00 p.m. Southern Medical Association, fellowship hour, Suite 277, Motel (by invitation)
- 6:30 p.m. Caribbean Holiday A-Go-Go, all members and guests, Fountain Terrace, Gold Room North, Center, and South

THURSDAY, MAY 18, 1967

- 9:30 a.m. General Session on Pediatrics, Hurricane Room E
- 9:30 a.m. General Session on EENT, Card Room
- 12:00 noon Miss. EENT Association, luncheon, Sun Room
- 1:30 p.m. House of Delegates, Fountain Terrace

EXECUTIVE BUSINESS



DR. NELSON

HOUSE OF DELEGATES

Monday, May 15, 1967
9:00 a.m.

The Buena Vista
Fountain Terrace

Howard A. Nelson,
Greenwood, Speaker

William E. Lotterhos,
Jackson, Vice Speaker



DR. LOTTERHOS

MEETINGS OF THE HOUSE

The meeting will be opened by the President, and the Speaker, in presiding over the House, will announce the order of business. An open session, Monday, May 15, 1967, to which all members and Auxiliary members are invited will feature the Address of the President, Dr. James T. Thompson, and a special address by Dr. Milford O. Rouse, President-elect of the American Medical Association. The adjourned meeting of the House will convene in the Fountain Terrace at 1:30 p.m. on Thursday, May 18.

REFERENCE COMMITTEES

Reports of Officers and Board of Trustees, Monday, May 15,
Fountain Terrace, 2:00 p.m.

Medical Practices, Monday, May 15, Gold Room South, 3:30 p.m.

Constitution and By-Laws, Monday, May 15, Fiesta Room, 3:00
p.m.

Miscellaneous Business, Monday, May 15, Gold Room Center,
2:00 p.m.

Nominating Committee, Wednesday, May 17, Gold Room Cen-
ter, 1:30 p.m.

THE SCIENTIFIC ASSEMBLY

COUNCIL ON SCIENTIFIC ASSEMBLY

JAMES L. ROYALS, M.D., CHAIRMAN



DR. ROYALS

THE COUNCIL

SETH H. BARRON, EENT

PAUL B. BRUMBY, GENERAL PRACTICE

WILLIAM E. WEEMS, MEDICINE

CHESTER H. LAKE, OB-GYN

J. LEE OWEN, PEDIATRICS

SHELBY W. MITCHELL, PREVENTIVE MEDICINE

GEORGE E. GILLESPIE, SURGERY

THE SCIENTIFIC EXHIBIT

HURRICANE ROOM D
THE BUENA VISTA

MEDICAL MOTION PICTURES

CALVIN T. HULL, CHAIRMAN

THE TECHNICAL EXHIBIT

HURRICANE ROOMS A-C
THE BUENA VISTA

CONDUCT OF THE SCIENTIFIC ASSEMBLY

The order of exercise, papers, and discussion as set forth in the official program shall be followed until completion. All papers read before the association shall become its property. Each paper must be read by its author and deposited with the Secretary (or Chairman) when read.

THE SCIENTIFIC EXHIBIT

Physicians, foundations, and organizations will present the Scientific Exhibit. Physician-members of the Mississippi State Medical Association are eligible for the Aesculapius Award, given for excellence of presentation, quality of content, and originality. This award, a permanent plaque, also offers an honorarium of \$200 and is presented as a joint project of the association and the Mead Johnson Laboratories. Others may not participate in the competition, but they are eligible to receive recognition for outstanding presentations. The Scientific Exhibit is located in Hurricane Room D, The Buena Vista Hotel.

EXHIBITORS

- "Cyrosurgical Treatment of Parkinson's Disease"
John D. Jackson, M.D., New Orleans, Louisiana
- "Cardiovascular Surgery at UMC—Experience With Over 1,000 Cases"
James D. Hardy, M.D.; J. Harold Conn, M.D.; and Suhayl S. Saleh, M.D., Jackson
- "Surgical Treatment of Ebstein's Anomaly"
James D. Hardy, M.D., and Hilary H. Timmis, M.D., Jackson
- "Improving the Results in Strangulation Obstruction"
William O. Barnett, M.D.; Robert L. Elliott, Jr., M.D.; and Robert I. Oliver, M.D., Jackson
- "Selective Arterial Catheterization"
Carlos M. Chavez, M.D.; William R. Fain, M.D.; J. Harold Conn, M.D.; James D. Hardy, M.D.; and Joseph Schor, M.D., Jackson
- "Essentials for Success in Cardiopulmonary Resuscitation"
Mississippi Heart Association, Jackson
- "The Mississippi Artificial Kidney Program"
John D. Bower, M.D., Jackson
- "Photoallergic Contact Dermatitis Due to Antibacterial Compounds"
John G. Forshner, M.D., and Silas E. O'Quinn, M.D., New Orleans, Louisiana
- "Reno Vascular Hypertension"
Thomas L. Kilgore, Jr., M.D., Jackson
- "Cardiac Surgery"
Charles W. Pearce, M.D., and Oscar Creech, Jr., M.D., New Orleans, Louisiana
- "Cerebral Vascular Surgery"
Charles W. Pearce, M.D., and Oscar Creech, Jr., M.D., New Orleans, Louisiana

MEDICAL MOTION PICTURES

As an extension of the program of the Scientific Assembly, selected medical motion pictures will be shown in conjunction with general sessions. The schedule follows:

Tuesday, May 16

- 8:00 a.m. Hurricane Room E
 "Modern Management of Pregnancy in the Rh Negative Sensitized Woman"
 "Vaginitis Therapy"
 "Mechanisms of Action of Oral Contraceptives"
- 1:00 p.m. Hurricane Room E
 "Cardiac Resuscitation"
 "Peritonitis—Some Causes and Management"

Wednesday, May 17

- 8:00 a.m. Hurricane Room E
 "Airway Obstruction"
 "Dermatologic Office Procedures"
 "The Miracle of Dialysis"

Thursday, May 18

- 8:30 a.m. Hurricane Room E
 "Cancer in Children"
 "Age Minus 60 Day—The Low Birth Weight Infant"
 "Medical Care for Adolescents"
- 8:30 a.m. Card Room
 "Magnetic vs. Nonmagnetic Intraocular Foreign Bodies —An Ultrasonic Determination"
 "Contact Ulcers and Granulomas of the Vocal Chords"
 "Structure and Function of the Middle Ear"

THE TECHNICAL EXHIBIT

The Mississippi State Medical Association presents with pride the 1967 Technical Exhibit. Established firms engaged in the manufacture and distribution of pharmaceuticals, supplies, equipment, and in providing varied services will present exhibits. Visit each exhibit often and discuss products and services with the Professional Service Representatives. Only registered members and guests are admitted. The Technical Exhibit is located in Hurricane Rooms A-C, The Buena Vista Hotel.

EXHIBITORS	BOOTH
Abbott Laboratories, North Chicago, Ill.	20
Americana Corporation, New York, N. Y.	25
Arnar-Stone Laboratories, Mount Prospect, Ill.	44
Atlas Chemical Industries, Inc., Pasadena, Calif.	48
Bentex Pharmaceutical Co., Houston, Texas	16
Bristol Laboratories, Syracuse, N. Y.	12
Carnation Company, Los Angeles, Calif.	11
Ciba Pharmaceutical Products, Inc., Summit, N. J.	7
Coca-Cola Company, Atlanta, Ga.	46
Contour Chair Company, Baton Rouge, La.	23-24
Geigy Pharmaceuticals, Yonkers, N. Y.	49
Home Life Insurance Co., Jackson, Miss.	36
Kay Surgical, Inc., Jackson, Miss.	39
Lanier Company, Jackson, Miss.	31
Lederle Laboratories, Pearl River, N. Y.	47
C. Dewitt Lukens Co., St. Louis, Mo.	30
Mallinckrodt Pharmaceuticals, St. Louis, Mo.	34
Marshall Erdman and Associates, Inc., Madison, Wis.	33
McNees Medical Supply Co., Jackson, Miss.	1-2
Mead Johnson Laboratories, Evansville, Ind.	6
Merck Sharp and Dohme, Philadelphia, Pa.	18
Merrill Lynch, Pierce, Fenner and Smith, Inc., Jackson, Miss. ...	26

Mississippi Hospital and Medical Service, Jackson, Miss.	45
Mutual Benefit Life Insurance Co., Newark, N. J.	17
Ortho Pharmaceutical Corporation, Raritan, N. J.	22
Parke, Davis and Company, Detroit, Mich.	9
William P. Poythress and Co., Inc., Richmond, Va.	50
A. H. Robins Company, Richmond, Va.	19
William H. Rorer, Inc., Fort Washington, Pa.	29
St. Paul Fire and Marine Insurance Co., St. Paul, Minn.	5
Sandoz Pharmaceuticals, Hanover, N. J.	15
W. B. Saunders Company, Philadelphia, Pa.	21
Schering Corporation, Union, N. J.	4
G. D. Searle and Company, Chicago, Ill.	8
Smith Kline and French Laboratories, Philadelphia, Pa.	32
Smith, Miller and Patch, Inc., New York, N. Y.	3
Southern Surgical Supply Co., Inc., New Orleans, La.	10
Syntex Laboratories, Palo Alto, Calif.	40
Travelers Insurance Co., Jackson, Miss.	37
U. S. Vitamin and Pharmaceutical Corp., New York, N. Y.	35
Winthrop Laboratories, New York, N. Y.	38

SCIENTIFIC GRANTS

Eli Lilly and Company, Indianapolis, Ind.
 S. E. Massengill Company, Bristol, Tenn.
 Merck Sharp and Dohme, West Point, Pa.
 Upjohn Company, Kalamazoo, Mich.

REGISTRATION FOR EXHIBIT PRIZES

Visit the Technical Exhibits often and qualify for the drawing of attractive prizes. Obtain necessary initials as you visit each booth. Deposit cards at Registration not later than 12:30 p.m., Thursday, May 18.

SCIENTIFIC PROGRAM

Tuesday, May 16, 1967
Hurricane Room E
Beginning at 9:00 a.m.

Chester H. Lake, Jackson
Chairman

John E. Lindley, Meridian
Secretary



DR. LAKE

RUPTURED UTERUS—A TEN YEAR SURVEY
Lewis D. Lipscomb, Jackson

CARCINOMA OF THE CERVIX IN PREGNANCY
Warren C. Plauche, Biloxi

AMNIOCENTESIS—TRUTH OR CONSEQUENCES
Henry A. Thiede, Jackson

CURRENT STATUS OF INFECTIOUS DISEASES IN PREGNANCY
Stewart A. Fish, Memphis, Tennessee

GENERAL CONCEPTS OF VAGINITIS THERAPY
Herman L. Gardner, Houston, Texas

SCIENTIFIC PROGRAM

Tuesday, May 16, 1967
Hurricane Room E
Beginning at 2:00 p.m.

George E. Gillespie, Jackson
Chairman

Raymond S. Martin, Jr., Jackson
Secretary



DR. GILLESPIE

EMERGENCY ROOM CARE OF THE CRITICALLY INJURED
Richard J. Field, Jr., Centreville

RESPIRATORY MANAGEMENT OF THE ACUTELY INJURED PATIENT
Charles R. Stephen, Dallas, Texas

SURGERY FOR ISCHEMIA OF LOWER EXTREMITIES
W. Andrew Dale, Nashville, Tennessee

IMPROVING THE RESULTS IN STRANGULATION OBSTRUCTION
William O. Barnett, Jackson

POST-OPERATIVE ABDOMINAL COMPLICATIONS
Richard F. Riley, Meridian

SCIENTIFIC PROGRAM

Wednesday, May 17, 1967
Hurricane Room E
Beginning at 9:00 a.m.

Paul B. Brumby, Lexington
Chairman

Charles R. Jenkins, Laurel
Secretary



DR. BRUMBY

THERAPEUTICS NOT LEARNED IN BOOKS
Toxey E. Hall, Belzoni

PROBLEMS IN THE TREATMENT OF THYROID DISEASE
Herbert G. Langford, Jackson

THE PHYSICIAN'S ROLE IN COMMUNITY MENTAL HEALTH
R. Layton McCurdy, Atlanta, Georgia

SCIENTIFIC PROGRAM

Wednesday, May 17, 1967
Hurricane Room E
Beginning at 10:45 p.m.

Shelby W. Mitchell, Ellisville
Chairman

Rhea L. Wyatt, Holly Springs
Secretary



DR. MITCHELL

THE BATTERED CHILD SYNDROME
Ray E. Helfer, Denver, Colorado

GLAUCOMA DETECTION IN FLORIDA
Joseph E. Frydman, Jacksonville, Florida

EARLY RECOGNITION OF DIABETES MELLITUS
John C. Floyd, Ann Arbor, Michigan

SCIENTIFIC PROGRAM

Wednesday, May 17, 1967
Hurricane Room E
Beginning at 2:00 p.m.

William E. Weems, Laurel
Chairman

William C. Kellum, Tupelo
Secretary



DR. WEEMS

ARTIFICIAL CARDIAC PACING IN STOKES-ADAMS ATTACKS
Thomas M. Blake, Jackson

CORONARY CARE IN A SMALL COMMUNITY HOSPITAL
William H. Rosenblatt, Jackson

CINE-ANGIOGRAPHY IN CORONARY ARTERY DISEASE
Robert D. Leachman, Houston, Texas

SURGICAL TREATMENT OF ANGINA PECTORIS
John L. Ochsner, New Orleans, Louisiana

SCIENTIFIC PROGRAM

Thursday, May 18, 1967
Hurricane Room E
Beginning at 9:30 a.m.

J. Lee Owen, Jackson
Chairman

Charles P. Tharp, Tupelo
Secretary



DR. OWEN

INFANT MORTALITY IN MISSISSIPPI
Frank M. Wiygul, Jackson

NEONATAL X-RAY EMERGENCIES
John P. Dorst, Baltimore, Maryland

THE MANAGEMENT OF NEONATAL HYPERBILIRUBINEMIA
Thomas R. Boggs, Jr., Philadelphia, Pennsylvania

CURRENT TRENDS IN PKU PLANNING
William F. Sistrunk, Jackson

SCIENTIFIC PROGRAM

Thursday, May 18, 1967
Card Room
Beginning at 9:30 a.m.

Seth H. Barron, Columbia
Chairman

E. M. Herring, Jr., Hattiesburg
Secretary



DR. BARRON

PROBLEMS OF STRABISMUS SURGERY

George S. Ellis, New Orleans, Louisiana

INFECTIOUS AND ALLERGENIC CONDITIONS OF THE EYE, NOSE AND THROAT

Sam H. Sanders, Memphis, Tennessee

FUNGUS KERATITIS DUE TO CURVULARIA SUBLATE

John E. Green, Hattiesburg

GOLF TOURNAMENT

The annual association golf tournament will be conducted at the Sunkist Country Club on Wednesday, May 17, Dr. A. V. Hays of Gulfport, chairman. The \$10 entrance fee includes one green fee ticket and two 19th Hole refreshment tickets. Awards to winners will be made at 5:00 p.m. in the clubhouse. Handicaps are not needed, the two flights being divided among those over and under 55 years of age. Advance registration is encouraged, sending name and fee to Dr. Hays at the ENT Hospital, 13th and 31st Avenue, Gulfport 39501. Tuesday rounds are acceptable for the single round 18 hole play. Preregistrants may pick up tickets at the pro shop; others at General Registration at the Buena Vista. Club facilities are available to players' families.

ESSAYISTS



DR. BOGGS

THOMAS R. BOGGS, JR., M.D., Philadelphia, Pennsylvania. Senior Physician, Section on Newborn Pediatrics, Pennsylvania Hospital. Medical Education: University of Pennsylvania, 1946. Diplomate, American Board of Pediatrics.

W. ANDREW DALE, M.D., Nashville, Tennessee. Associate Professor of Clinical Surgery, Vanderbilt University. Medical Education: Vanderbilt University, 1944. Diplomate, American Board of Surgery and Board of Thoracic Surgery.



DR. DALE



DR. DORST

JOHN P. DORST, M.D., Baltimore, Maryland. Associate Professor of Radiology, The Johns Hopkins University. Medical Education: Cornell University, 1953. Diplomate, American Board of Radiology.

GEORGE S. ELLIS, M.D., New Orleans, Louisiana. Associate Professor of Ophthalmology, L.S.U. Medical Education: Tulane University, 1946. Diplomate, American Board of Ophthalmology.



DR. ELLIS



DR. FISH

STEWART A. FISH, M.D., Memphis, Tennessee. Chairman, Department of Ob-Gyn, The University of Tennessee College of Medicine. Medical Education: University of Pennsylvania, 1949. Diplomate, American Board of Obstetrics and Gynecology.

ESSAYISTS

JOHN C. FLOYD, JR., M.D., Ann Arbor, Michigan. Associate Professor of Internal Medicine, University of Michigan. Medical Education: L.S.U., 1954. Diplomate, American Board of Internal Medicine.



DR. FLOYD



DR. FRYDMAN

JOSEPH E. FRYDMAN, M.D., Jacksonville, Florida. Ophthalmic Consultant, Florida State Board of Health. Medical Education: University of Illinois, 1961.

HERMAN L. GARDNER, M.D., Houston, Texas. Associate Professor of Ob-Gyn, Baylor University. Medical Education: University of Texas, 1937. Diplomate, American Board of Obstetrics and Gynecology.



DR. GARDNER



DR. HELFER

RAY E. HELFER, M.D., Denver, Colorado. Director, Pediatric Out-Patient Department, University of Colorado. Medical Education: State University of New York. Diplomate, American Board of Pediatrics.

ROBERT D. LEACHMAN, M.D., Houston, Texas. Assistant Professor of Internal Medicine, Baylor University. Medical Education: Baylor University, 1954. Diplomate, American Board of Internal Medicine and American Board of Cardiology.



DR. LEACHMAN

ESSAYISTS



DR. OCHSNER

JOHN L. OCHSNER, M.D., New Orleans, Louisiana. Chairman, Department of Surgery, Ochsner Clinic. Medical Education: Tulane University, 1952. Diplomate, American Board of Surgery and Board of Thoracic Surgery.



DR. ROUSE

MILFORD O. ROUSE, M.D., Dallas, Texas. President-elect, American Medical Association. Medical Education: Baylor University, 1927. Diplomate, American Board of Internal Medicine.



DR. SANDERS

SAM H. SANDERS, M.D., Memphis, Tennessee. Professor of Otolaryngology, University of Tennessee College of Medicine. Medical Education: University of Tennessee, 1927. Diplomate, American Board of Otolaryngology.



DR. STEPHEN

CHARLES R. STEPHEN, M.D., Dallas, Texas. Professor of Anesthesia, University of Texas. Medical Education: McGill University, 1940. Diplomate, American Board of Anesthesiology.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

44th Annual Session
Buena Vista Hotel
May 15-17, 1967



MRS. DEES

OFFICERS

MRS. J. GORDON DEES
Jackson
President

MRS. D. L. CLIPPINGER
Hazlehurst
President-Elect



MRS. CLIPPINGER

ANNUAL SESSION CHAIRMEN

MRS. F. C. MINKLER, JR.
Pascagoula
General Chairman

MRS. S. J. SIMMONS, III
Pascagoula
Co-Chairman

MRS. J. HURD GADDY
Long Beach
Transportation

MRS. T. E. BENEFIELD, JR.
Gulfport
Decorations

MRS. JAMES R. FOSTER
Biloxi
Registration

MRS. FRANK O. SCHMIDT
Ocean Springs
Luncheon

MRS. JULIUS A. BOSCO
Pascagoula
Tea

MRS. H. K. ROUSE, JR.
Gulfport
Newspaper Publicity

MRS. E. F. CHANTON
Biloxi
Publicity

Monday, May 15, 1967

1:00-5:00 p.m. Registration, Mrs. James R. Foster, Chairman
Lobby, The Buena Vista

2:00 p.m. Finance Committee Meeting, Mrs. A. T. Tatum

99th ANNUAL SESSION

Tuesday, May 16, 1967

7:30 a.m. Preconvention Executive Board Breakfast
Gold Room Center, The Buena Vista

8:00-3:00 p.m. Registration
Lobby, The Buena Vista

9:00 a.m. General Session, Mrs. J. Gordon Dees, Presiding
Gold Room South, The Buena Vista

Invocation

Auxiliary Pledge

Mrs. M. S. Riddell, Jr., Winona

Address of Welcome

Mrs. H. H. Robinson, Pascagoula

Response

Mrs. Curtis W. Caine, Jackson

Introductions

Mrs. Asher Yaguda, President, Woman's
Auxiliary to AMA

Mrs. Charles T. Wilkinson, President, Woman's
Auxiliary to SMA

Mrs. F. C. Minkler, Convention Chairman
Woman's Auxiliary to MSMA

Mrs. D. L. Clippinger, President-elect Woman's
Auxiliary to MSMA

Greetings from James T. Thompson, M.D.
President, MSMA

Greetings from Temple Ainsworth, M.D.
President-elect, MSMA

Greetings from George E. Twente, M.D.
Auxiliary Advisory Chairman, MSMA

Report from AMA Auxiliary
Mrs. Asher Yaguda

Report from SMA Auxiliary
Mrs. Charles T. Wilkinson

Minutes

Treasurer's Report

Finance Committee Report

Business

Roll Call and Reports

President's Report

Mrs. J. Gordon Dees, Jackson

Credentials and Registration

Mrs. F. C. Minkler, Pascagoula

Report of the Nominating Committee

Mrs. J. Hurd Gaddy, Long Beach

Election of Officers

Appointment of Delegates to AMA Auxiliary

Memorial Service

Mrs. Walter T. Colbert, Natchez

Adjournment

3:00-5:00 p.m. Tea
Mrs. Julius A. Bosco, Chairman

Wednesday, May 17, 1967

8:00 a.m. Past Presidents' Breakfast

Mrs. J. Hurd Gaddy, Presiding
Sun Room, The Buena Vista

8:00-12:00 noon Registration

Lobby, The Buena Vista

12:00 noon Luncheon, The Fountain Terrace

Mrs. Frank O. Schmidt, Chairman

Mrs. J. Gordon Dees, Presiding

Guest Speaker

Mrs. Asher Yaguda

Installation of Officers for 1967-68

Mrs. Yaguda

Courtesy Resolution

Mrs. T. A. Baines, Jackson

Adjournment

3:00 p.m. Postconvention Executive Board Meeting

Mrs. D. L. Clippinger, Presiding

Card Room, The Buena Vista

6:30 p.m. MSMA Fellowship Hour and Caribbean Holiday

Fountain Terrace and Gold Rooms

The Buena Vista

OTHER MEETINGS

MISSISSIPPI ASSOCIATION OF PATHOLOGISTS

Hotel Buena Vista

May 14-15, 1967

ROBERT R. GATTLING, Jackson, *President*

LEO J. SCANLON, JR., Natchez, *President-elect*

KENNETH M. HEARD, Jackson, *Secretary*

Sunday, May 14

2:30 p.m. Business Meeting, Gold Room Center

6:30 p.m. Fellowship Hour and Banquet, Poolside Room

Monday, May 15

9:00 a.m. Scientific Meeting, Gold Room Center

Symposium on the Autopsy

Panelists

Harper K. Hellems, Jackson

Robert M. O'Neal, Houston, Texas

P. P. Newman, Jr., Lake Charles, La.

Round Table Discussion

AMERICAN COLLEGE OF SURGEONS,
MISSISSIPPI CHAPTER

Hotel Buena Vista
May 15, 1967

WILLIAM O. BARNETT, Jackson, *President*
BEDFORD F. FLOYD, JR., Gulfport, *President-elect*
DAWSON B. CONERLY, JR., Hattiesburg, *Secretary*

11:00 a.m. Business Meeting, Hurricane Room E

12:00 noon Fellowship Luncheon, Poolside Room
Fellows of the Mississippi Chapter, American College of Surgeons

1:30 p.m. Scientific Meeting, Hurricane Room E
The Premalignant Potential of Polyps of the Colon and Rectum
John E. Ray, New Orleans, La.
Remedial Operations for Disabling Postgastrectomy Symptoms
J. Lynwood Herrington, Jr., Nashville, Tenn.
Problem Cases in Surgery
Case Presentations (Five minutes)
General Discussion (Five minutes)
Jack V. King, Jackson
Richard J. Field, Jr., Centreville
William L. Thornton, Meridian
William N. Crowson, Clarksdale
George E. Gillespie, Jackson

MISSISSIPPI UROLOGICAL ASSOCIATION

Buena Vista
May 15, 1967

GERALD WESSLER, Gulfport, *President*
ONNIE P. MYERS, Jackson, *President-elect*
JOEL L. ALVIS, Jackson, *Secretary-Treasurer*

12:00 noon Luncheon, Sun Room

2:00 p.m. Scientific Meeting
The Use of Intravenous Gantrisin Following T.U.R. of the Prostate
W. Meredith Bradford, Jackson
Report of a Case of the Nephrotic Syndrome Due to Penicillamine Therapy
W. H. Merrell, Jr., Jackson
Reconstruction of the Severely Damaged Urinary Tract in Children
W. Lamar Weems and Joel L. Alvis, Jackson

LOUISIANA-MISSISSIPPI OPHTHALMOLOGICAL AND
OTOLARYNGOLOGICAL SOCIETY

The Edgewater Gulf
May 19-20, 1967

LYNN D. ABERNETHY, Jackson, *President*
F. W. RAGGIO, Lake Charles, *President-elect*
EDLEY H. JONES, Vicksburg, *Secretary*

Friday, May 19, 1967

8:00 a.m. Registration, Convention Hall

9:00 a.m. Meeting Called to Order, Convention Hall
Introduction of New Fellows and Candidates Announcements

9:15 a.m. President's Address
Lynn D. Abernethy, Jackson

9:35 a.m. Importance of Early Recognition and Proper Treatment
of Acute and Sub-Active Infectious Sinusitis
Sam H. Sanders, Memphis, Tennessee
Coffee Break

11:00 a.m. Injuries of the Face and Jaws: Part I
Bruce F. Holding, Jr., Montgomery, Alabama
Immediately following adjournment at about 12:15 p.m.,
there will be a meeting of the Louisiana Eye, Ear, Nose,
and Throat Society.

12:30 p.m. Luncheon, Ballroom

2:15 p.m. The Reasons for Failure of Medical and Surgical Therapy
for Glaucoma
T. E. Sanders, St. Louis, Missouri

3:30 p.m. Inflammation of the Orbit
F. C. Blodi, Iowa City, Iowa

4:45 p.m. Council Meeting, Parlor E

Saturday, May 20, 1967

8:30 a.m. Registration, Convention Hall

9:00 a.m. Executive Session for Fellows, Convention Hall
Coffee Break

10:30 a.m. Unilateral Exophthalmos
F. C. Blodi

11:45 a.m. Recognition and Management of Iris Tumors

2:30 p.m. Injuries of the Face and Jaws: Part II
Bruce Holding, Jr.

3:45 p.m. Management of Chronic Infectious and/or Allergic
Sinusitis
Sam H. Sanders

ENTERTAINMENT FEATURES

Friday, May 19, 1967

- 9:00-10:00 a.m. Ladies Coffee Hour, Hawaiian Terrace
- 6:30-7:30 p.m. Cocktail Party, Ballroom
- 6:30-7:30 p.m. Children's Punch Party, Hawaiian Terrace

Saturday, May 20, 1967

- 7:00 p.m. Cocktails, Convention Hall
- 7:30 p.m. Buffet Dinner and Dance
 - Corsages for the ladies, Compliments of the Edgewater Gulf
 - Music by Jay Zainey

GOLF AND TENNIS TOURNAMENTS

Golf and tennis tournaments will be held during the meeting and are limited to Fellows, physician-guests, and their ladies, registered at the meeting. Those desiring to participate are requested to notify Dr. G. B. Flagg, Gulf National Bank Building, Gulfport, Mississippi, prior to the meeting and must register (at Registration Desk) not later than 12:00 noon, Friday, May 19.

REGISTRATION FEES

For Fellows of the Society and residents in ophthalmology and otolaryngology, there are no fees, but residents must have certificates from their superintendent or chief. For ophthalmologists and otolaryngologists in service, \$5.00, and for all others, \$15. This fee covers all charges except for luncheon, \$2.50 and for guest at the dinner and dance, \$10.00; and registration fees for golf and tennis tournaments.

OLE MISS MEDICAL ALUMNI

University of Mississippi medical alumni will meet on Monday, May 15. Arrangement for registration at the Hotel Buena Vista have been made by alumni officials. A general business meeting will be conducted at 4:30 p.m. in the Gold Room Center. The Fellowship Hour, buffet supper, and dance will be conducted at the Buena Vista Motel pool area, beginning at 7:00 p.m., Dr. T. E. Wilson, Jr. of Jackson, president, presiding. Other officers are Dr. E. E. Ellis, Laurel, president-elect, and Mr. Charles William Price, Jackson, secretary. Further details and tickets may be secured from Mr. Price at the University Medical Center, Jackson, or at Ole Miss Registration, Biloxi.

TENNESSEE MEDICAL ALUMNI

University of Tennessee medical alumni will meet for a fellowship hour and banquet on Tuesday, May 16, the Buena Vista Hotel Fountain Terrace Room, beginning at 6:30 p.m. Dr. James G. Thompson of Jackson is program chairman.

TULANE MEDICAL ALUMNI

Medical alumni of the Tulane University will sponsor a fellowship hour and banquet on Tuesday, May 16, in the Sun Room, the Buena Vista Hotel, at 7:00 p.m. Dr. Harry D. Schmidt of Biloxi is program chairman.

VANDERBILT MEDICAL ALUMNI

Medical graduates of the Vanderbilt University School of Medicine will meet on Tuesday evening, May 16, in the Buena Vista Motel Poolside Room for a reunion and fellowship hour, beginning at 5:30 p.m. Dr. E. C. Hamilton of Gulfport is arrangements chairman.

MISSISSIPPI COMMISSION ON HOSPITAL CARE

Members of the Mississippi Commission on Hospital Care will meet on Monday, May 15, in the Fiesta Room, Buena Vista, at 7:30 a.m. Additional information will be supplied by Mr. Foster L. Fowler of Jackson, executive director of the commission.

MEDICINE AND RELIGION

The Committee on Medicine and Religion will meet for breakfast on May 16 in the Fiesta Room, Hotel Buena Vista, at 7:30 a.m.

FIFTY YEAR CLUB

Members of the Fifty Year Club will be honored at a luncheon on Tuesday, May 16, in the Fiesta Room, Hotel Buena Vista, at 12 o'clock noon. Dr. John B. Howell, Jr., of Canton, chairman of the Board of Trustees, will preside.

MISSISSIPPI SOCIETY OF ANESTHESIOLOGISTS

Members of the Mississippi Society of Anesthesiologists will meet on Tuesday, May 16, in the Card Room, Hotel Buena Vista, at 11:00 a.m. The luncheon will be conducted in the Gold Room Center at 12 o'clock noon. Officers of the society are Drs. C. H. Webb, Jr., of Jackson, president; James F. Savage, Jr., of Jackson, president-elect; and Marion P. Parker of Jackson, secretary-treasurer.

AMERICAN COLLEGE OF OBSTETRICS AND GYNECOLOGY

Mississippi Fellows of the American College of Obstetrics and Gynecology will enjoy an informal breakfast on Tuesday, May 16, in the Sun Room, Hotel Buena Vista, at 7:30 a.m. Dr. Daniel R. Thornton, Jr., of Meridian is arrangements chairman.

FLYING PHYSICIANS ASSOCIATION

Mississippi members of the Flying Physicians Association and nonmember physicians interested in private aviation will meet for a luncheon on Tuesday, May 16, in the Sun Room, Hotel Buena Vista, at 12 o'clock noon. Officers are Drs. Bernard T. Hickman of Jackson, chairman; James E. Wadlington of Jackson, secretary.

INTERNATIONAL COLLEGE OF SURGEONS

Fellows of the Mississippi Chapter, International College of Surgeons, will conduct a luncheon meeting beginning at 11:45 a.m. on Tuesday, May 16, in the Poolside Room, Buena Vista Motel. Officers are Drs. R. Mayo Flynt of Meridian, president; Willis Walker of Hattiesburg, president-elect; and Guy T. Vise of Meridian, secretary.

DIABETES ASSOCIATION OF MISSISSIPPI

All interested physicians are invited to attend the meeting of the Diabetes Association of Mississippi which will be conducted on Wednesday, May 17, in Hurricane Room E, immediately following adjournment of the Section on Medicine. Afterwards, a fellowship hour will be conducted in the Poolside Room, Buena Vista Motel, honoring Dr. John C. Floyd, Jr., of Ann Arbor, Mich., the featured speaker for the meeting.

MISSISSIPPI PSYCHIATRIC SOCIETY

Members of the Mississippi Psychiatric Society and interested physicians will meet at 1:30 p.m. on Wednesday, May 17, in the Fiesta Room, Hotel Buena Vista. Officers are Drs. I. C. East of Whitfield, president; Anthony J. Santangelo of Jackson, president-elect; and William L. Jaquith of Whitfield, secretary-treasurer.

MISSISSIPPI SOCIETY OF INTERNAL MEDICINE

The Mississippi Society of Internal Medicine will conduct a luncheon on Wednesday, May 17, in the Sun Room, Hotel Buena Vista, at 11:30 a.m. Officers are Drs. C. Ralph Daniel of Jackson, president; Raymond F. Grenfell of Jackson, president-elect; and Joe S. Covington of Meridian, secretary.

MILLSAPS COLLEGE ALUMNI

Alumni and friends of Millsaps College will conduct a breakfast meeting on Wednesday, May 17, in the Gold Room Center, Hotel Buena Vista, honoring the memory of Dr. Joseph Price, former chairman of the Department of Chemistry. Arrangements chairman is Dr. William C. McQuinn of Jackson.

CARIBBEAN HOLIDAY A-GO-GO

Mixing the subtropical atmosphere of the Caribbean Islands with the go-go rhythm of the day, members of the association, their ladies, and guests will enjoy a Caribbean Holiday A-Go-Go on Wednesday evening, May 17. The banana boat arrives with the libation in the Gold Room, North, Center, and South, and on the Fountain Terrace at 6:30 p.m. as the Calypsonians musically take the group to Kingston Town and Montego Bay. After the dinner featuring foods of the islands, Jerry Lane and his Orchestra will play for dancing. Costumes are in order, and tickets will be available at General Registration in the Hurricane Room Foyer.

MAGP LUNCHEON

The Mississippi Academy of General Practice will sponsor a luncheon on Wednesday, May 17, in the Gold Room South at 12 o'clock noon. Mr. L. A. Clark of the National Space and Aeronautics Administration Mississippi Test Facility will be the speaker. Officers of the Academy are Drs. Eldon L. Bolton of Biloxi, president; C. R. Jenkins of Laurel, president-elect; Ben F. Banahan, Jr., of Jackson, secretary; and Miss Louise Lacey of Jackson, Executive Secretary.

PAST PRESIDENTS

Past presidents of the Mississippi State Medical Association and Woman's Auxiliary, respectively, will enjoy breakfast meetings on Wednesday morning, May 17. MSMA past presidents will meet in the Poolside Room, Buena Vista Motel, at 7:30 a.m., and Auxiliary past presidents, in the Sun Room, Buena Vista Hotel, at 8:00 a.m.

SOUTHERN MEDICAL ASSOCIATION

An invitational fellowship hour, honoring Dr. Guy T. Vise of Meridian, president of the Southern Medical Association, will be conducted in Suite 277, Buena Vista Motel, at 5:00 p.m. on Wednesday, May 17. Dr. Howard A. Nelson of Greenwood, SMA councilor for Mississippi, is host.

MISSISSIPPI EENT ASSOCIATION

Members of the Mississippi Eye, Ear, Nose, and Throat Association will conduct a business meeting on Thursday, May 18, in the Sun Room, Hotel Buena Vista, immediately following adjournment of the Section on EENT. Afterwards, the association will enjoy a luncheon which will be served in the same room. Officers are Drs. Francis E. McCullough of Jackson, president; Thomas W. Wesson of Tupelo, president-elect; and Samuel B. Johnson of Jackson, secretary-treasurer.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1967, Atlantic City, N. J.; Clinical Convention, Nov. 26-29, 1967, Houston, Texas. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

American Academy of General Practice, Sept. 18-21, 1967, Dallas, Texas. Mr. Mac F. Cahal, Executive Director, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

American College of Surgeons, Annual Congress, Oct. 2-6, 1967, Chicago, Ill. John P. North, Director, 55 E. Erie St., Chicago, Ill. 60611.

Southern Medical Association, Nov. 13-16, 1967, Miami Beach, Fla. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

International College of Surgeons, North American Federation, 32nd Annual Meeting, April 30-May 4, 1967, Bal Harbour, Fla. Mr. Stanley Henwood, Executive Director, 1516 Lakeshore Dr., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi State Medical Association, May 15-18, 1967, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Annual Meeting, Oct. 17-19, 1967, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September, and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box L, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

Handbook of the House of Delegates

Mississippi State Medical Association

May 15-18, 1967

SUPPLEMENTAL REPORT OF THE SECRETARY-TREASURER

Dr. James L. Royals: Limitation of Terms. At the 90th Annual Session, Jackson, 1958, the House of Delegates adopted amendments to Chapter VIII, Section 1, and to Chapter IX, Section 1, of the By-Laws which respectively limited consecutive terms of service of Trustees and council members to three or a total of nine consecutive years. Since the amendments cannot be *ex post facto* or retroactive, the limitations imposed by them are operative from and after elections at the 90th Annual Session. Those who have served continuously in these elected capacities since election at the 90th Annual Session in 1958 are, under the By-Laws, ineligible for re-election at the present annual session.

Board of Trustees. Those Trustees whose terms expire in 1967 are all eligible for re-election, since none of the three has served three consecutive terms.

Council Members. Some council members, by reason of having served three consecutive terms, are ineligible for re-election. All such incumbents are so identified in the report of vacancies in office.

SUPPLEMENTAL REPORT OF THE SECRETARY-TREASURER

Dr. James L. Royals: Effective May 18, 1967, the following vacancies in office are declared to exist by reason of expiration of terms in accordance with applicable portions of the Constitution and By-Laws. All such vacancies should be filled in accordance with procedures described in Chapter VI of the By-Laws:

President-elect

Nominate three, no two of whom may be from the same county, elect one.

APRIL 1967

To: House of Delegates
Mississippi State Medical
Association

On recommendation of the Speaker and Vice Speaker, the Board of Trustees has approved publication of those annual and supplemental reports of officers and constitutional bodies of the association to the House of Delegates in advance of the 99th Annual Session as are ready for presentation. This pre-publication is intended to afford all members of the association advance opportunity to review the reports and to confer with delegates in this connection.

No report herein published becomes official or a statement of policy until formally presented to and acted upon by the House of Delegates.

HOWARD A. NELSON
SPEAKER

WILLIAM E. LOTTERHOS
VICE SPEAKER

Vice Presidents

Terms 1967-68. Nominate three for the Northern Area, three for the Mid-State Area, and three for the Southern Area. Elect one for each area.

Secretary-Treasurer

Term 1967-70. Nominate three, elect one. Incumbent: James L. Royals, Jackson.

Speaker, House of Delegates

Term 1967-70. Nominate three, elect one. Incumbent: Howard A. Nelson, Greenwood.

HOUSE OF DELEGATES / Continued

Vice Speaker, House of Delegates

Term 1967-70. Nominate three, elect one. Incumbent: William E. Lotterhos, Jackson.

Associate Editor

Term 1967-69. Nominate two, elect one. Incumbent: Thomas W. Wesson, Tupelo.

Delegate to AMA

Term January 1, 1968-December 31, 1969. Nominate two, elect one. Incumbent: J. P. Culpepper, Jr., Hattiesburg.

Alternate Delegate to AMA

Term January 1, 1968-December 31, 1969. Nominate two, elect one. Incumbent: B. B. O'Mara, Biloxi.

Board of Trustees, District 1, 2, and 3

Terms 1967-70. Nominate two for each district, elect one for each district. Incumbents: Lyne S. Gamble, Greenville, District 1; Joseph B. Rogers, Oxford, District 2; and J. T. Davis, Corinth, District 3.

Council on Budget and Finance

Term 1967-70. Nominate two, elect one. Incumbent: Daniel L. Hollis, Biloxi.

Council on Medical Education

Term 1967-70. Nominate two, elect one. Incumbent: E. LeRoy Wilkins, Clarksdale, ineligible for re-election.

Council on Constitution and By-Laws

Term 1967-70. Nominate two, elect one. Incumbent: John B. Howell, Jr., Canton, ineligible for re-election.

Council on Legislation, Districts 4, 5, and 6

Terms 1967-70. Nominate two for each district, elect one for each district. Incumbents: Paul B. Brumby, Lexington, District 4; William E. Lotterhos, Jackson, District 5; and Lamar Arrington, Meridian, District 6. Dr. Arrington is ineligible for re-election.

Judicial Council, Districts 7, 8, and 9

Terms 1967-70. Nominate two for each district, elect one for each district. Incumbents: A. T. Tatum, Petal, District 7; G. Swink Hicks, Natchez, District 8; and W. J. Weatherford, Pascagoula, District 9. All are ineligible for re-election.

Council on Medical Service, Districts 7, 8, and 9

Terms 1967-70. Nominate two for each district, elect one for each district. Incumbents: T. E. Ross, Jr., Hattiesburg, District 7; R. J. Field, Jr., Centreville, District 8; and Wesley L. McFarland,

Bay St. Louis, District 9. Dr. Ross is ineligible for re-election.

State Board of Health

In accordance with Section 7024, Mississippi Code of 1942, the House of Delegates shall make nominations to the Governor of Mississippi for selection and appointment of members of the State Board of Health, except for dental and optometric members. The House of Delegates must make the following nominations:

Public Health District 1

Term 1968-1974. Nominate six and select by plurality three. Incumbent: DeWitt Hamrick, Corinth.

Public Health District 3

Term 1968-1974. Nominate six and select by plurality three. Incumbent: George F. Archer, Greenville.

Board of Directors,

Mississippi Hospital and Medical Service

Terms 1968-1971. Nominate and elect four. Incumbents: R. B. Caldwell, Baldwin; G. Swink Hicks, Natchez; George H. Martin, Vicksburg; and T. E. Ross, Jr., Hattiesburg.

Each scientific section, in accordance with Section 2, Chapter IV of the By-Laws, shall elect a chairman who shall serve for one year. Beginning in the 1967-68 association year, section secretaries shall be elected for terms of three years, except that shorter initial terms shall be necessary to fulfill the requirements of this new provision in the By-Laws. Accordingly, sections will elect secretaries for initial terms as follows:

For Terms 1967-68

The Sections on General Practice and Eye, Ear, Nose, and Throat.

For Terms 1967-69

The sections on Obstetrics and Gynecology and Preventive Medicine.

For Terms 1967-70

The Sections on Pediatrics, Surgery, and Medicine.

REPORT OF THE EXECUTIVE SECRETARY

Mr. Rowland B. Kennedy: Duties and Responsibilities. Your Executive Secretary is responsible for maintaining the headquarters office, for conducting the administrative affairs of the association, and for various fiduciary duties as required by Article VII of the Constitution and Section 7, Chapter VII, of the By-Laws. Your Executive Secretary reports in detail to the Board of Trustees

and general officers. Because of this frequent, periodic reporting, this report is purposely brief and limited in scope.

Executive Staff. At the 98th Annual Session in 1966, the Board of Trustees stated that the executive staff was taxed to capacity and that at least two additional staff members were urgently needed. The position of Editorial Assistant in the JOURNAL Department remains unfilled, but two additional staff members have been employed to assist in meeting demands of increased activities and work loads. There are a total of nine full time staff members. The Board and general officers are conversant with staffing needs and work volume, and close coordination in this connection with the Board and officers is maintained.

The staff, in addition to performing routine, recurring administrative tasks in membership, accounting, JOURNAL production, and medical care plan administration, assists committees, councils, the Board, and general officers with supportive services. These assignments are divided between your two executives who are individually and jointly responsible for this function.

Expression of the Staff. The 1966-67 association year has seen the highest level of association activities in our history. The staff is grateful for the opportunity to serve the association and to share a small part in its progress and programs of service.

REPORT OF THE DELEGATES TO AMA

Reporting Format. At the 98th Annual Session of the association in 1966, your Delegates to the American Medical Association revised the format of their reports to this House of Delegates, limiting the narrative and discussion to policy review. Because of the excellent reporting of AMA annual and clinical conventions through regular publications, this reporting format is again employed in accordance with the wishes of the House.

Chicago Annual Convention. The AMA House of Delegates met at Chicago during the 115th Annual Convention, June 26-30, 1966. Drs. J. P. Culpepper, Jr., of Hattiesburg and Stanley A. Hill of Corinth represented our association, Dr. George E. Twente of Jackson being unable to attend.

Major subjects considered included health legislation, billing procedures, ethics, health manpower, and remedial action for cases of discrimination against physicians because of race. One of the most spirited debates was over the proposed dues increase which was adopted. Both Mississippi Delegates, acting in accordance with Resolution No. 4, 98th Annual Session of our association, voted against the increase. The action fixed AMA

annual dues at \$70 effective with the 1967 membership year.

More than a dozen reports and resolutions related directly to the then-emerging Medicare program under Public Law 89-97. The House accepted and commended a report of the Board of Trustees which outlined a policy for giving wide dissemination to information on the operational aspects of the program, methods of billing for professional services thereunder, the purpose and function of utilization review, and the advisory function of the AMA in the implementation of the law.

Of particular importance is the policy statement that "The American Medical Association opposes any program of dictation, interference or coercion, whether direct or indirect, affecting the freedom of choice of the physician to determine for himself the extent and manner of participation or financial arrangement under which he shall provide medical care to patients under Public Law 89-97."

The House of Delegates unequivocally opposed the statutory requirement for certification and recertification of Medicare patients.

The most controversial issue in connection with Medicare was a resolution which stated that "it shall be deemed unethical for a physician to displace a hospital-based physician who is attempting to practice separate billing when said displacement is primarily designed to circumvent separate billing." Legal counsel advised against adoption of the resolution, but the House voted to adopt it. After suit was instituted by the Department of Justice against the College of American Pathologists and after the matter was explored in greater depth with the Department of Justice, the House subsequently rescinded the resolution.

In debate over a proposal to permit a physician to dispense drugs, appliances, or eyeglasses only when approved by his local and state medical societies, the House acted to encourage consultation by physicians who dispense with local medical societies where any question in this connection arises. Six resolutions dealt with the subject of discrimination against applicants for membership because of race. In lieu of the resolutions, the House directed that a change in the by-laws be prepared for consideration at the clinical convention.

In other actions, the House urged optimum use of health manpower and asked for future studies on additional training program. A new committee to study this area of interest was authorized. The Declaration of Helsinki, a guide to those engaged in clinical medical investigation with human subjects, was adopted. Opposition was again expressed against compulsory assessment of hospital

(Turn to page 266)



The President Speaking

'Task of Decision'

JAMES T. THOMPSON, M.D.

Moss Point, Mississippi

THE HOUSE OF DELEGATES of our state medical association is anything but an exclusive club of a hundred or so individuals who can vote just about anything they wish. It is a representative, responsible, and responsive body who give of their time, pay their own way, and make considered decisions which, in one way or another, affect the health and well-being of more than two million Mississippians.

Being a delegate is a privilege, because the office is a warranty of confidence reposed in a physician by his colleagues. As such, a delegate has a lot to live up to in weighing carefully the best interests of patients and his profession. He cannot afford self-indulgence of personal prejudice, and if the record of the majority is a fair test, he does not. He needs your counsel and support, given just as wisely and fairly as he gives his services in behalf of his colleagues.

When the House meets at the 99th Annual Session at Biloxi on May 15, let us have the best group of delegates ever assembled in our 111 years of history as a state medical association. Let us hear the propositions patiently, debate the issues fairly and forthrightly, and decide wisely. Let every interested member of the association appear before the reference committees and discuss his views on the issues, also making his voice heard in the highest council of Mississippi medicine. We cannot do less for those who have borne the burden of council and committee work through the year nor could we fail to make real the foundation upon which medical organization is built, representative government from the grassroot up. ★★★



The European Brain Drain and the Quest for Excellence

I

THE BRAIN DRAIN emigration of Europe's bright young people westward is a problem of serious proportion on both sides of the Atlantic. There is now no arguing that the continent has become underdeveloped scientifically and technologically in comparison with the United States, and what's more, the gap is growing. In America, the burning question is what to do about the influx. The problem has Johnson talking to Wilson and Wilson talking to Kiesinger. Kosygin has mentioned it to DeGaulle. And, not in the least, it is a concern to American medicine.

Notably prominent among these best educated young Europeans seeking admission to the United States each year are as many as 20,000 physicians. For the most part, they possess only the undifferentiated medical degree, and they are seeking quality, advanced postgraduate medical education which is not to be found today in Europe. Only about one out of five is admitted to this nation after taking the examination of the Educational Council for Foreign Medical Graduates, but that leaves an astonishing 4,000 who must be absorbed into the ranks of American medicine each year.

While the preponderance of the exodus west is made up of physicians, there are also engineers, chemists, physicists, and scientific graduates in nearly every discipline. They are of all nationalities except for the hard line, iron curtain countries, being mostly German, French, Austrian, Swedish,

and especially English. While the Russians permit no emigration, their anxiety is clearly showing, because Chairman Kosygin proposed a "technological alliance" between Russia and Western Europe during his recent visit to France. Obviously, the Soviets are worried over the deterioration of the scientific community on the continent and the general absence of postgraduate level academic give-and-take.

It is bitterly ironic that the center of the Renaissance foresees a coming dark age

II

Almost a third of the more than 30,000 approved residency posts in American teaching hospitals are occupied by foreign medical graduates. Now, by no means is this to say that these are all inferior physicians, but it is also clear that foreign medical schools have not been able to keep pace with American institutions. More than that, the outflow of the brighter graduates from Europe must be viewed as a factor contributing to a widening of the excellence gap.

The Educational Council for Foreign Medical Graduates was established to sift out the better applicants for entry into the United States and to provide an equivalency measure of educational attainment of the émigré vis-à-vis his American-trained colleague. In most instances, it works well; in some, it has not.

There is also the language barrier, and it's an obstacle of no small import. The ECFMG exami-

nation takes this into account, but some say it does not sufficiently emphasize the pressing necessity of fluency in English. Since the greatest number of physician-applicants for admission into the United States is from Great Britain, the central problem is one of training in medicine with language no consideration. As a matter of fact, one-third of all British medical graduates, as determined by British surveys, are leaving that country each year. And the number of students entering British medical schools is declining.

III

Besides lamenting the brain drain, the authorities are searching for answers as to why it is happening. Partly, it is money. A typical British intern works an astonishing 100 hours a week for about \$200 per month, in terms of U. S. dollars. That figures out to less than 45 cents an hour. But the overriding reason is the scientific climate, and it has become a downward spiral which increases in velocity.

In Europe, over-regulated conditions stymie scientific inquiry. Without inquiry, there is lack of stimulation, and without stimulation, there is stagnation. Thus, the spiral tightens and if anything, becomes irreversible.

From and after World War II, American medicine emerged as the world leader. This posture of leadership has been strengthened with the building of medical facilities in numbers and excellence without parallel in the history of the world. The forward thrust in American medical education and research has left both the free and Communist worlds far behind. The proof of the proposition is clear for all to see: Were this not true, then why would the best brains in Europe be clamoring for entry into the United States? Money alone cannot be the answer.

Secretary of Defense McNamara confirmed all of this in his recent address at Jackson. He underscored the failure of education in Europe and the inevitable consequences which this failure is bringing.

IV

It is fascinating to observe that some critics of American medicine—and we have them here, too—say that it isn't all that good. Basing their contentions on one sort of statistic or another, they point to infant mortality, the life span, incidence of a given disease entity, or some such unconvincing reason. Nobody deplores any such occur-

rences, statistical or otherwise, more than American physicians.

But statistics alone are a poor yardstick, indeed, for measuring the quality of a nation's medical community. They must and nearly always do fail to take into account socioeconomic circumstances, genetic background, and even legal considerations, as, for example, abortion laws. What has to do with genes usually has little to do with medicine—as yet. And if a mother is less than well educated in the facts of childbearing, the best facilities and professional resources in the world are of little avail. To this extent, the United States has a poverty of riches in some areas.

Since the end of World War II, exactly 23 American scientists have won Nobel prizes in medicine and physiology. This is more than have been won by all the physicians and scientists in all other countries of the world combined. More than half of the major drug discoveries have been made by Americans in America working for American pharmaceutical companies. Eighty per cent of the prescriptions written today could not have been written in 1957, because the drugs did not then exist.

While England built her one hospital in 20 years, the United States constructed 750, demonstrating that there are valid measures of excellence besides the laboratory. Since the death rate from cancer in the United States is significantly lower than it is in Europe and since cancer is treatable



"I need a checkup. I just found out from TV that I've been using a woman's deodorant."

Mediatric®

Designed for the “metabolically spent”

Nutritional reinforcement for those who can't
—or won't—eat properly...balanced amounts of
estrogen and androgen to counteract declining
gonadal hormone secretion and its sequelae of
premature degenerative changes...mild
antidepressant for a gentle “mood” uplift...

The estrogen component in MEDIATRIC is
PREMARIN® (conjugated estrogens—equine),
the natural estrogen most widely prescribed for its
superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation*. It contributes a gentle “mood” uplift
through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and
Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from
pregnant mares' urine and standardized in terms of the weight
of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active;
helps relieve general malaise, easy fatigability, vague pains in
the bones and joints, loss of appetite, and lack of interest
usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyl-
testosterone component.

WARNING: Some patients with pernicious anemia may not
respond to treatment with the Tablets or Capsules, nor is
cessation of response predictable. Periodic examinations and
laboratory studies of pernicious anemia patients are essential
and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast ten-
derness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of
Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and
uterus, cyclic therapy is recommended (3 week regimen with
1 week rest period—Withdrawal bleeding may occur during
this 1 week rest period).

In the male: A careful check should be made on the status
of the prostate gland when therapy is given for protracted
intervals.

SUPPLIED: No. 910 — MEDIATRIC Liquid, in bottles of 16
fluidounces and 1 gallon. No. 752 — MEDIATRIC Tablets,
in bottles of 100 and 1,000. No. 252 — MEDIATRIC Cap-
sules, in bottles of 30, 100, and 1,000.



Mediatric®
steroid-nutritional compound



to an extent, then it follows that our lower mortality figures have some meaning in terms of the excellence of medical care. And the same holds true for many other diseases, including tuberculosis, pneumonia, strokes, and influenza.

That we are living 25 years longer today than were our forebearers at the turn of the century and that in the past 25 years medicine has learned more than in the preceding 50 centuries are circumstances to which a nationality cannot be assigned. But when it comes to applying and teaching that knowledge, just about everybody is knocking at the door of the United States. To this extent, the brain drain from Europe is a little better understood and takes the shape of a problem with pertinency and relevancy to the times in which we live.—R.B.K.

North Lawndale: Mail Order Medical Care?

Of all publicly-funded medical care programs, none is more controversial than the so-called area and neighborhood health center program sponsored by the Office of Economic Opportunity under the poverty program. Where and when OEO wishes, it may establish such an operation to render any and all care, usually without the need of formality of assent by the state in which the center is established.

President James T. Thompson of the state medical association has said that "while such a program probably carries the seeds of its own destruction, it is fully capable of disrupting established health care services for a significant period of time."

In the Economic Opportunity Act Amendments of 1966, the health-conscious 89th Congress appropriated \$100 million for operation of 50 area and neighborhood poverty program health centers. Eight centers were actually funded under the enactment: Boston, New York, the Bronx, two in Chicago, Denver, Watts in the Los Angeles area, and Bolivar County, Mississippi.

The same legislation authorized but did not fund a total of 400 such centers. It is distressing to realize that no new legislation would be needed to extend this program to any state. All OEO needs is the money.

Boston has its Columbia Point project in the program, the pilot and bellwether. Los Angeles' Watts will have its center as something of a consolation, after the city's voters turned thumbs down on a \$12 million bond issue to build a county

hospital in the area. But it is in Chicago that an incredible succession of events surrounds the development of the North Lawndale OEO neighborhood health center.

The Sears-Roebuck Foundation has agreed to provide the land, architectural services, and construction costs for the OEO center which will be located in the 3300 block of Grenshaw St.

In making the announcement, the Sears-Roebuck Foundation said: "The inner city ghetto packs in large numbers of people in relatively small geographical areas. The population composition of these areas has undergone great changes. Areas that were once upper middle class neighborhoods are today composed of largely migratory people who are unemployed and in many cases unemployable. With such a high density of population confined to small areas, there is always internal pressures (sic) that can lead to social and health hazards. Unfortunately, such areas inevitably suffer from insufficient and comprehensive medical care despite the large numbers residing in the area."

The Foundation's statement continues: "The Foundation's national offices are in this area. We feel an obligation, as a resident, to do all we can to make this a stable neighborhood. Increasing the quality of health care can help in this direction."

The project has the active cooperation of Chicago's Mt. Sinai Hospital and the Chicago Board of Health. As the first such center to be constructed from scratch under the OEO program, the unit will boast 25,000 square feet of floor space and offer pediatric, internal medicine, ophthalmological, otolaryngological, social, psychological, health education, nutrition, nursing, immunization, dental, optometric, and emergency services.

The Sears-Roebuck Foundation says that "with the announcement of the North Lawndale project, it is hoped that this will serve as a springboard for future urban activities that will bring physicians to distressed urban areas. . . ."

This unusual partnership of private enterprise and direct social action will raise more than a few eyebrows. Let it be hoped that the new and different 90th Congress will take a long, hard look at this sort of experimentation with the reorganization of medical care. It probably will, too.—R.B.K.

Orphanhood: The Shadow of Family Life

The growing life span and relatively low death rate among adults of childbearing age have worked together to help American children enjoy the care

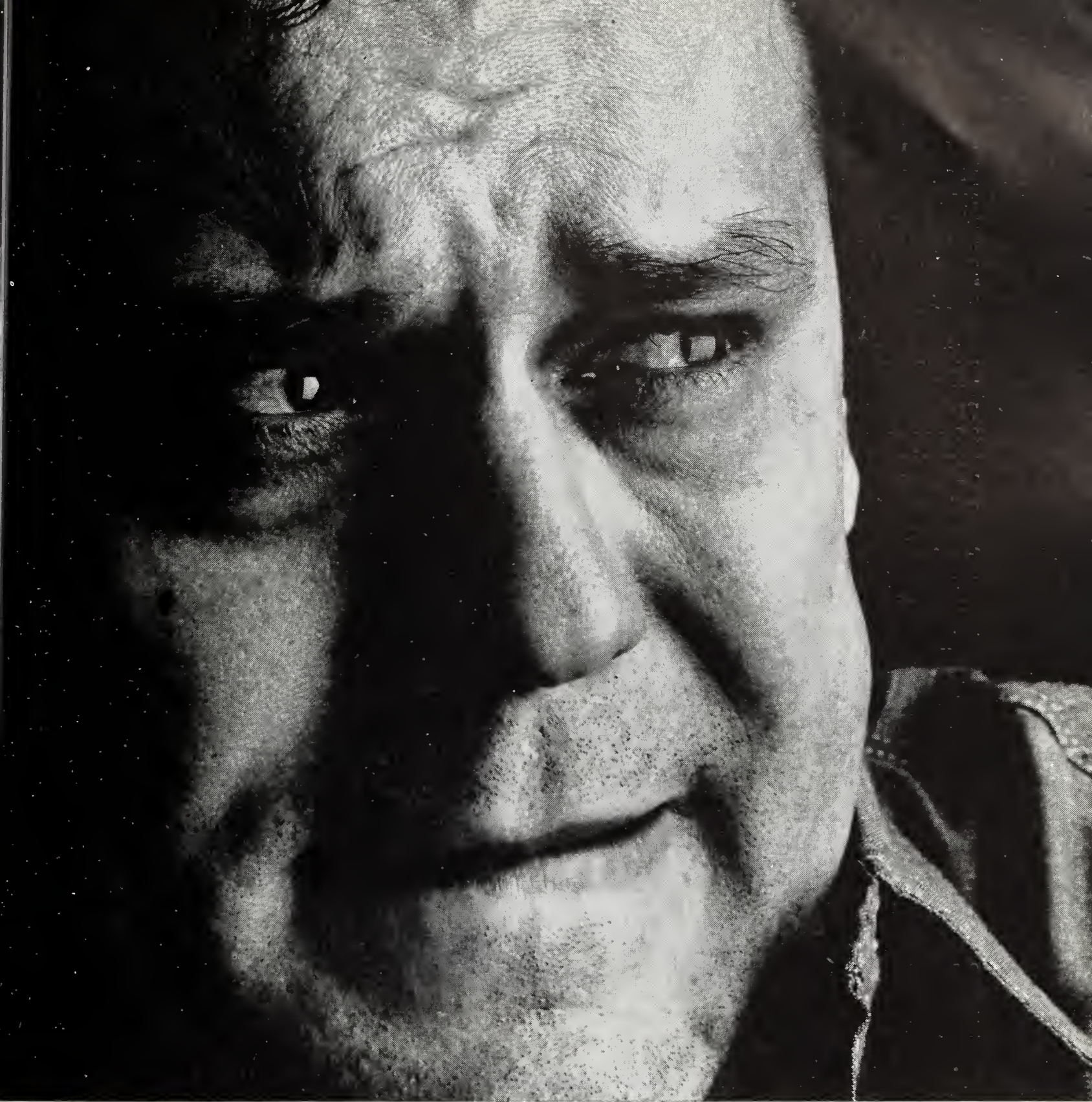


Photo professionally posed

Mike expects a penicillin injection. He's about to be pleasantly surprised.

His physician is going to prescribe an oral penicillin —PEN•VEE® K (potassium phenoxymethyl penicillin). It's usually so rapidly and completely absorbed that therapeutic serum levels are produced in 15 to 30 minutes. Higher serum levels generally last longer than with oral penicillin G.

Indications: Infections due to pathogens susceptible to oral penicillin G. Prophylaxis of rheumatic fever in patients with previous history of the disease.

Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin-allergy may occur. Measures for treating anaphylaxis should be readily available; epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; anti-

histamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β -hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

Composition: Tablets—125 mg. (200,000 units) and 250 mg., (400,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN•VEE® K**
(potassium phenoxymethyl penicillin)



and advantages of their natural parents. But orphanhood, a little-discussed, sometimes embarrassing subject, is still a problem of no small magnitude. In 1966, there were 3.4 million orphans under 18 years of age in the United States. This figures out to 4.8 per cent of the total child population in the nation, nearly one out of every 20 children.

The burden of orphanhood is usually borne by women, because they generally outlive their husbands. Of all the orphans in the country today, 71 per cent have lost their fathers, and a little over 26 per cent have lost their mothers only. Each year, about 845,000 American families are broken by the death of a husband or wife, orphaning an estimated 420,000 children under 18 years of age.

Often this becomes a medical problem, especially when circumstances are such that the child is adopted into another family. The enlightened policy of the American Medical Association calling on physicians, attorneys, and social workers to support one another in behalf of the orphaned or illegitimate child's interest is worthy and more than timely in the light of the hard-hitting facts. —R.B.K.

The ACS and the Evil of Fee-Splitting

Re-enforcing its unrelenting crusade against fee splitting in any form, the American College of Surgeons has announced a new eight-point program to prevent, detect, document, and eradicate the unwholesome practice wherever it may be found. It is perhaps the strongest pronouncement yet made in this connection by the 54 year old specialty body.

The College reiterates, as a beginning premise, its unyielding stand against fee-splitting, and it pledges increased effort on the part of its Fellows in the ultimate elimination of the evil. The statement points out that the College welcomes the cooperation of the Joint Commission on Accreditation of Hospitals, also pledged against fee-splitting, as are all state medical associations and the AMA.

The Regents of the College have urged their state chapters to investigate and diligently report any occurrence of fee-splitting and to work with other leaders in medicine to get at the facts. As a matter of policy, the College will continue to re-

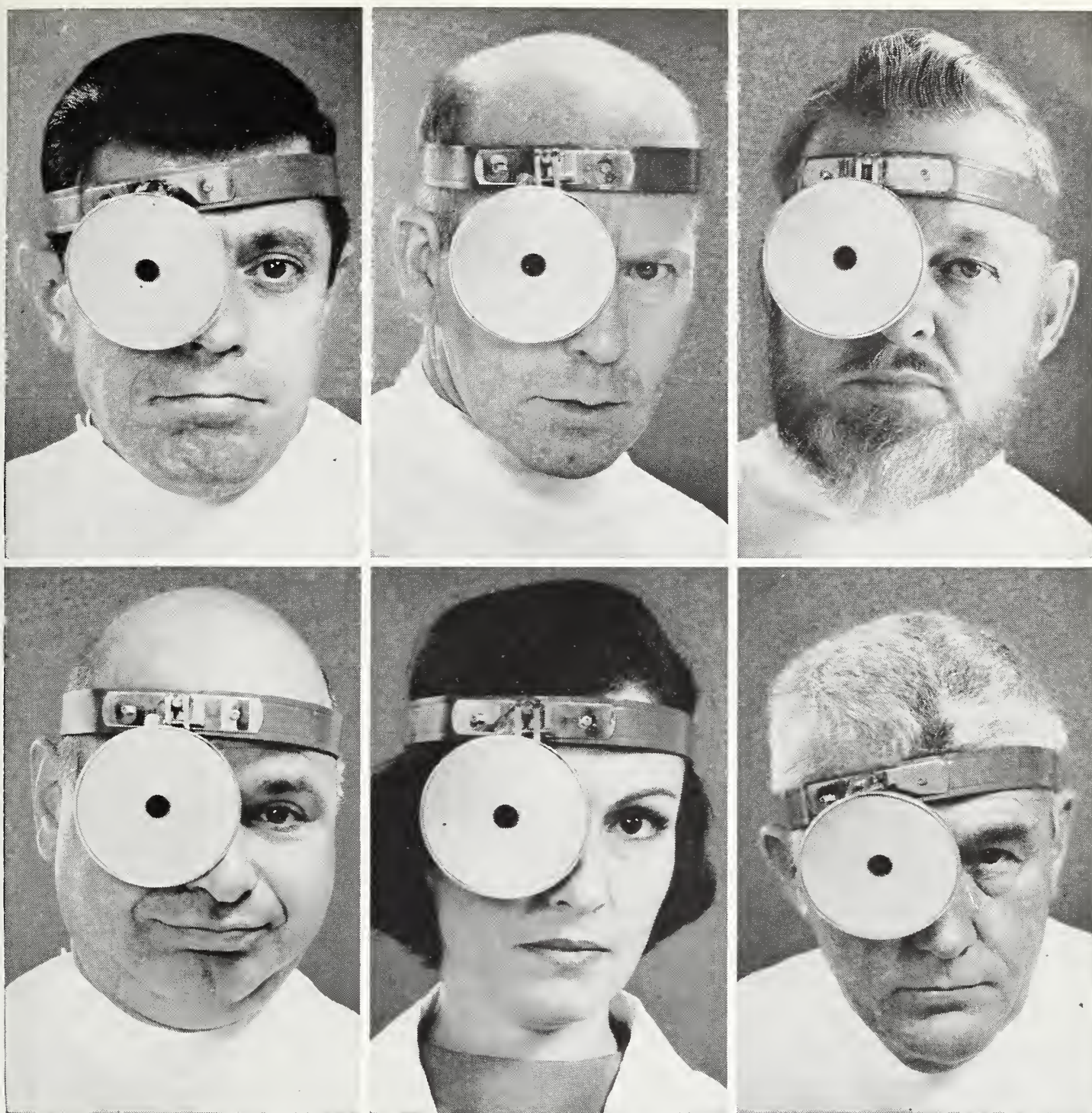
quire its initiates to denounce fee-splitting and pledge themselves never to participate in the practice of it.

The College goes farther in recommending that each hospital require applicants for staff membership to make a similar pledge. As a final point, the Regents recommend separate billing for all physicians as the only fair and proper way to notify the patient of his financial responsibility for services received.

The Mississippi State Medical Association has long been among the most outspoken groups in American medicine in denouncing and putting teeth in its policies against this evil. Nearly 10 years ago, the association declined to agree to a proration of surgical fees under the Dependents' Medical Care Program, a practice which could have conceivably led to a form of fee-splitting. The action moved a high official of the College to chide a medical official in the Department of Defense that "it took a small state medical association to teach you a lesson in ethics." But whether a lesson were, in fact, taught or learned, the association's position was honored.

Mississippi physicians are justly proud of the fact that the practice of medicine in our state is wholesome. They will support this and other worthy efforts to purge their profession of any blotch upon its worthy calling and good purpose. —R.B.K.





"All Otolaryngologists are Alike"

Just look at them and you can see how much they have in common. Besides, they all go through pretty much the same training, and pass the same kinds of tests, and measure up to the same sort of standards. Therefore, all otolaryngologists are alike. Right?

Wrong! But that's no more preposterous than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more exacting. In fact, there are at least nine *specific differences* involving moisture content, purity, potency and speed of tablet disintegration,

which make the manufacture of Bayer® Aspirin so different.

These Bayer standards result in significant product benefits, including gentleness to the stomach and product stability, that enable Bayer Aspirin tablets to stay strong and gentle until they are taken.

So next time you hear someone say that *all* aspirin tablets are alike, you can say, with confidence, that "it just isn't so."

You might also say that all otolaryngologists aren't alike, either.





PERSONALS

BENJAMIN F. BANAHAN, JR., of Jackson has been named a member of the Committee on Chronic Diseases of the American Academy of General Practice. The four member body of the Academy seeks better means of controlling chronic disease through public programs of preventive medicine and improvement of private care.

ROBERT H. BOSTWICK of New Albany has announced the relocation of his offices on Oxford Road.

THOMAS M. DAVIS of Jackson has announced his candidacy for re-election as coroner of Hinds County, subject to the Republican primary. He has served in this office since being elected in a special election in 1965. The Mississippi Republican Party recently named Dr. Davis Third Congressional District chairman.

ERNEST G. DUCK of Purvis has been elected president of the Beaver Lake Club which is completing a \$300,000 recreational facility. The club will have an 18 hole golf course, mile-long lake, clubhouse, tennis courts, swimming pool, camping area, and special play areas for children of members.

G. B. FLAGG of Gulfport has been elected commander of the Mississippi Coast Power Squadron. The unit, a part of the U. S. Power Squadron, has as its purpose education in power boating and the promotion of boating safety.

RAYMOND F. GRENFELL of Jackson served as delegate to the American Society of Internal Medicine regional conference at New Orleans. Purpose of the ASIM meeting was examination and discussion of health legislation. The national society has a membership of more than 9,000 internists.

JIM G. HENDRICK was named Man of the Month by the Jackson Chamber of Commerce membership committee. He is immediate past president of the Central Medical Society, the state association's largest component.

JOSEPH E. JOHNSTON of Mount Olive has been named chief of staff of the Covington County Hospital. He is also serving as president-elect of the Mississippi Academy of General Practice.

WILLIAM E. LOTTERHOS of Jackson has been appointed a member of the Committee on Clinical Investigation of the American Academy of General Practice. He is currently serving as a member of the national organization's board of directors.

ERNEST J. McCRAW has been elected president of the medical staff of the Jones County Community Hospital. Other officers of the staff are JAMES C. WAITES, vice president; HARVEY B. WRIGHT, secretary-treasurer; and BOYCE WHITE, RICHMOND L. ALEXANDER, WILLIAM M. MAYERS, and MAX L. GOLDEN, members of the executive committee. All are engaged in practice in Laurel.

CECIL C. MCKLEMURRY of Sumner has been named director of the Tunica County Health Department. He is also serving as director of the health departments in DeSoto and Tate counties.

BRANTLEY B. PACE has been honored by the Monticello Jaycees who named him Outstanding Young Man of 1966.

WARREN C. PLAUCHE of Biloxi will be installed as a Fellow of the American College of Obstetrics and Gynecology at its April 17-20 meeting at Washington, D. C.

NORMAN W. TODD of Newton has occupied new quarters on South Main Street.

FRANK H. TUCKER, JR., of Meridian has been named a diplomate of the American Board of Surgery. He received his premedical education at Millsaps College and his medical degree from the University Medical Center where he also trained for five years in his specialty.

J. COLLINS WILLIAMS of Greenville has announced the removal of his offices to 1414 Hospital St. He limits his practice to obstetrics and gynecology.



NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BALL, OTTIS GENE, Tupelo. Born Gulfport, Miss., Nov. 22, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned Medical Center, Columbus, Ga., one year; radiology residency, University of Mississippi School of

Medicine, Jackson, three years; diplomate of the American Board of Radiology; Captain, U. S. Army, two years; elected Dec. 13, 1966, by Northeast Mississippi Medical Society.

DAWKINS, WILLIAM HUDDLESTON, Meridian. Born Louin, Miss., June 19, 1937; M.D., University of Mississippi School of Medicine, Jackson, 1963; interned Mississippi Baptist Hospital, Jackson, one year; elected Dec. 8, 1966, by East Mississippi Medical Society.

HULL, CALVIN TRAVIS, Jackson. Born Quitman, Miss., Oct. 7, 1933; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned University of Mississippi School of Medicine, Jackson, one year; ob-gyn residency, University of Mississippi School of Medicine, Jackson, three years; fellow, American College of Ob-Gyn, the American Fertility Society and the American Society of Colposcopists and Colpomicroscopists; Captain, U. S. Air Force; elected Jan. 3, 1967, by Central Medical Society.

KILGORE, THOMAS LAFAYETTE, JR., Jackson. Born Union Springs, Ala., Jan. 10, 1934; M.D., Medical College of Alabama, Birmingham, 1958; interned University Hospital, Birmingham, Ala., one year; residency, University of Mississippi School of Medicine, Jackson, four years; resident in cardiovascular and thoracic surgery, Baylor University Affiliated Hospitals, Houston, Tex.; diplomate of the American Board of Surgery; elected Jan. 3, 1967, by Central Medical Society.

OWEN, DAVID MCINTOSH, Hattiesburg. Born Gulfport, Miss., Oct. 6, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned John Gaston Hospital, Memphis, Tenn., one year; residency, University of Mississippi School of Medicine, Jackson, three years; fellowship, University of Mississippi School of Medicine, Jackson, two years; elected Sept. 8, 1966, by South Mississippi Medical Society.

ROBINSON, EVERETT EDWIN, III, Laurel. Born Meridian, Miss., Nov. 21, 1935; M.D., Emory University School of Medicine, Emory University, Ga., 1960; interned Crawford W. Long Memorial Hospital, Atlanta, Ga., one year; general surgery residency, Crawford W. Long Memorial Hospital, Atlanta, Ga., one year; neurosurgery residency, Emory University Hospital, Atlanta, Ga., four years; elected Sept. 8, 1966, by South Mississippi Medical Society.

SHAW, GRAHAM BOYD, Jackson. Born Indianola, Miss., Oct. 10, 1934; M.D., Tulane University School of Medicine, New Orleans, La., 1959; in-

terned University of Mississippi School of Medicine, Jackson, one year; internal medicine residency, University of Mississippi School of Medicine, Jackson; residency, Southeastern Medical School, Dallas, Tex.; member, American Thoracic Society; elected Jan. 3, 1967, by Central Medical Society.



DEATHS

BRYAN, ALBERT COLEMAN, SR., Meridian. M.D., University of Tennessee College of Medicine, Memphis, 1915; interned John Gaston Hospital, Memphis, Tenn.; past Vice President of MSMA; past President of the Lauderdale County Medical Society; Emeritus member of MSMA and member of the Fifty Year Club; died Feb. 24, 1967, aged 76.

HOKE, HARRY ELWOOD, Gulfport. M.D., University of Louisville School of Medicine, Ky., 1910; member, Southern Medical Association, Mississippi Academy of General Practice, American Academy of General Practice, and the MSMA Fifty Year Club; died Feb. 22, 1967, aged 83.

ROBERTS, RICHARD HARVILL, Houston. M.D., University of Tennessee College of Medicine, Memphis, 1942; interned Nashville General Hospital, Tenn., one year; member, American Heart Association; died Jan. 20, 1967, aged 51.



POSTGRADUATE CALENDAR

CONTROL OF DIABETES AND HYPERTENSION
University Medical Center, Jackson
April 13, 1967, beginning at 10 a.m.

Morning

CURRENT STATUS OF ORAL HYPOGLYCEMIC AGENTS

Leonard L. Madison, M.D., Professor of Internal Medicine, University of Texas Southwestern Medical School, Dallas

HYPERTENSIVE DIABETES

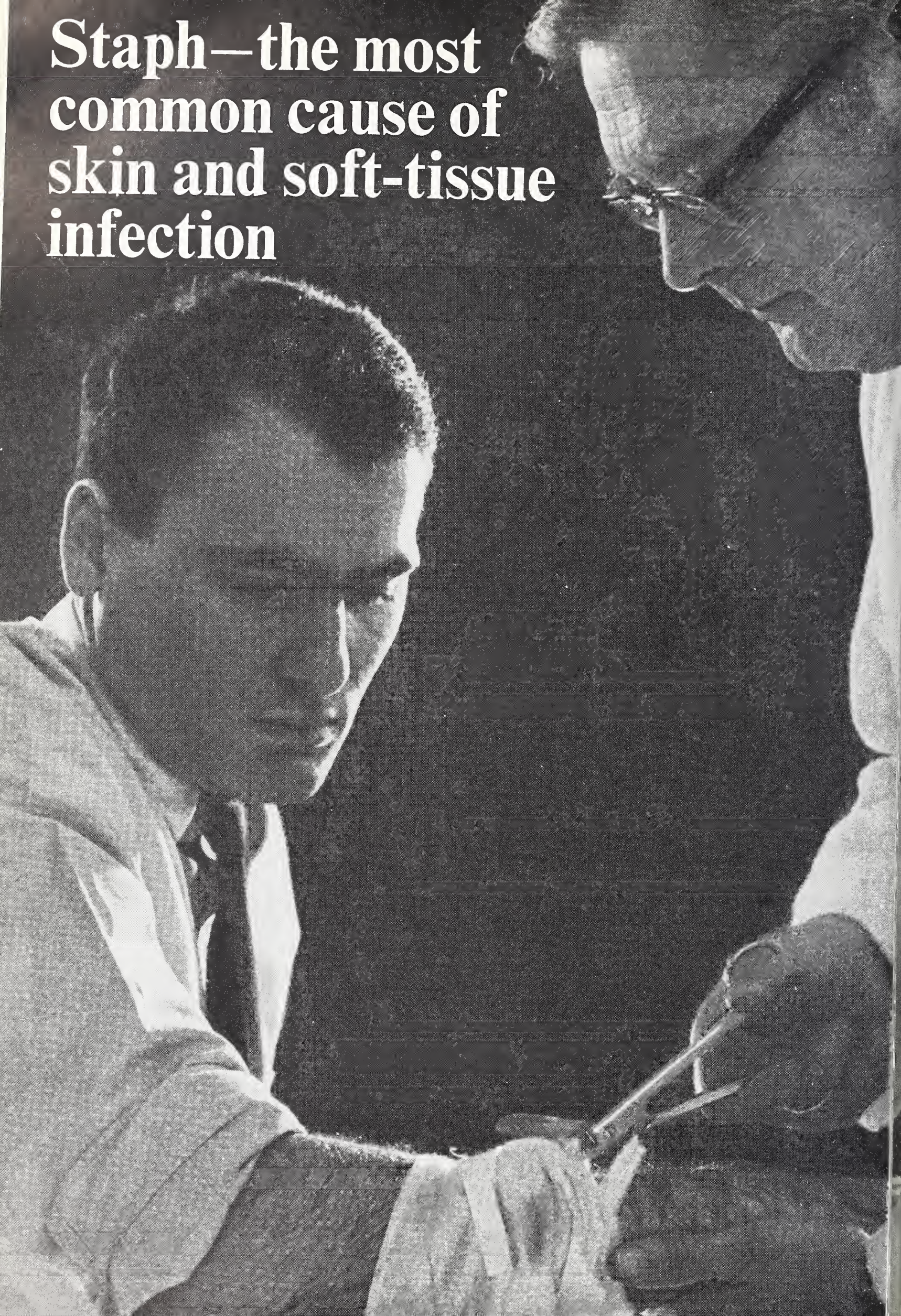
Herbert G. Langford, M.D.

VASCULAR SURGERY IN DIABETES

Surgery Grand Rounds

Recess for Lunch

Staph—the most common cause of skin and soft-tissue infection



reliably controlled with specific therapy



A suitable dosage form for every staph situation

staph—the most common cause of skin and soft-tissue infection—also is responsible for many more serious infections, such as pneumonia, osteomyelitis, and septicemia. Often, a seemingly minor skin infection is the source of metastatic spread to deeper structures. When findings on culture incriminate staph as the cause, Prostaphlin (sodium oxacillin) will provide specific effective therapy.

Bactericidal effectiveness. Hardly a staph organism can resist the bactericidal action of Prostaphlin (sodium oxacillin), as shown by a 34-month *in vitro* study. Of all staph isolates tested, 99.5% were sensitive to oxacillin.¹

Clinically proven. There is a high correlation between these *in vitro* findings and clinical results. Of 610 patients treated with Prostaphlin (sodium oxacillin), 89.8% were reported cured or improved, including those with staph infections resistant to penicillin G.² And since resistance does not appear to develop *in vivo*, therapy with oxacillin can be extended when necessary.

Outstanding safety record. Besides being staph-specific and rapidly absorbed—Prostaphlin (sodium oxacillin) has established an outstanding record of safety during five years of widespread clinical use. Continuous high blood levels of oxacillin have not produced toxic effects on kidney function, assuring a significant margin of safety. However, as with all penicillins, the possibility of allergic response should be considered. **Capsules, Oral Solution and Injectable.** Prostaphlin (sodium oxacillin) is available in three flexible dosage forms to suit the age of the patient and severity of infection—capsules, an oral solution for pediatric use, and multi-dose vials for injection, I.M. or I.V.

PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY: 8:12.6

References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N.Y. 2. Data on file, Bristol Laboratories.

BRISTOL

BRISTOL LABORATORIES/Division of Bristol-Myers Co., Syracuse, N.Y.

Whenever you
suspect staph
PROSTAPHLIN®
SODIUM OXACILLIN

Afternoon

OBESITY IN DIABETES

Buris R. Bashell, M.D., Professor of Medicine, Medical College of Alabama, Birmingham

PANEL: JUVENILE DIABETES

J. M. Montalvo, M.D., Moderator; Herbert G. Langford, M.D., Ben B. Johnson, M.D., and the Guest Faculty

Discussion Period

CIRCUIT COURSES

COMBINATION CIRCUIT

Natchez: April 18
Columbus: April 25

CHRONIC PELVIC PAIN IN THE FEMALE

GYNCOLOGICAL APPROACH
Calvin T. Hull, M.D.

PSYCHIATRIC ASPECTS
Joseph S. Roberts, M.D.

EAST CENTRAL CIRCUIT

Meridian: April 4

HEADACHE

NEUROLOGICAL APPROACH
Robert D. Currier, M.D.

NEUROSURGICAL CONSIDERATIONS
Forrest T. Tutor, M.D.

FUTURE CALENDAR

April 13

CONTROL OF DIABETES AND HYPERTENSION

April 20

MISSISSIPPI THORACIC SOCIETY

May 15-18

99TH ANNUAL SESSION, MSMA

September 12

THE THYROID AND RELATED PROBLEMS

October 12-14

ARTHRITIS SEMINAR

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRACTICE

November 10

SYMPOSIUM ON HAND INJURIES

Lilly Offers New Hospital Unit Dose

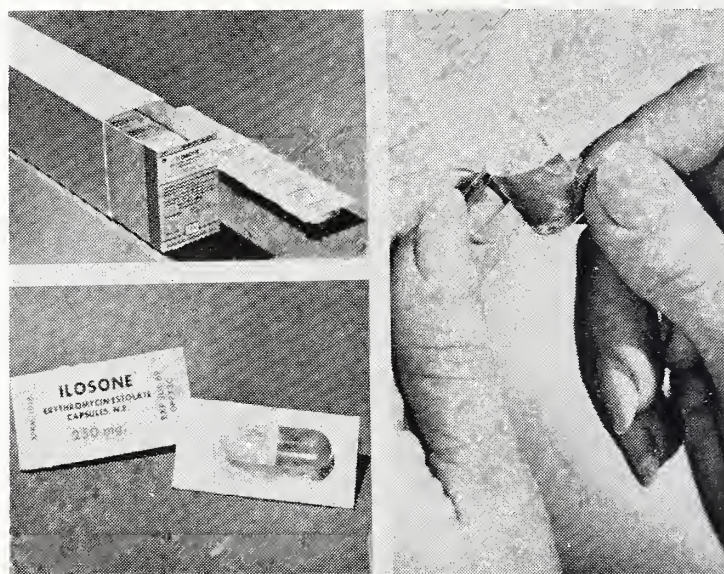
A new system of hospital drug identification involving unit-dose packaging and labeling has been announced by Eli Lilly and Company.

In the new system—introduced under the trademark *Identi-Dose™*—the label accompanies each capsule or tablet right to the patient's bedside, providing instant and accurate identification by name.

This is accomplished by individually packaging each dose in an airtight plastic bubble which is backed by a paper-laminated foil bearing the label with the medicine's name. The plastic bubble also serves as a container for dispensing the drug at the patient's bedside.

Identi-Dose™ packaging is designed primarily for hospital use.

In announcing the new system today, Eugene N. Beesley, Lilly president, described *Identi-Dose™* as "a further significant step" following the company's introduction last June of *Identi-Code™*, a system of positive identification of tablets and capsules through a code imprinted on each one. With *Identi-Code™* the exact formula



A new form of packaging and labeling of human medicines for hospital use has been introduced by Eli Lilly and Company, Indianapolis, under the name *Identi-Dose™* (unit dose medication, Lilly). *Identi-Dose* provides the hospital with strips of individually sealed capsules or tablets, each unit in the strip bearing the name of the medication.

of the drug can be determined by reference to a code index, published by the company and distributed to members of professions which deal with medical emergencies in which such information is needed quickly.



Book Reviews

Appraisal of Current Concepts in Anesthesiology, Vol. III. By John Adriani, M.D., Professor of Surgery, Tulane University School of Medicine and Director, Department of Anesthesiology, Charity Hospital of Louisiana. 522 pages. St. Louis: The C. V. Mosby Company, 1966. \$10.85.

In this volume, as explained in the preface, Doctor Adriani has assembled general reviews of the past and present thinking from the vast literature concerning topics in this specialty. These were made as reports by the residents and staff members of the Department of Anesthesiology of Charity Hospital in New Orleans. They are published in summary form specifically for the benefit of trainees and clinical practitioners in anesthesiology to afford them an opportunity to keep abreast of theory, developments, and application. However, many of the condensations are on subjects useful to general physicians and those in other specialties. For example, Chapters 14, 15, and 16 deal with present concepts of shock touching on the use of vasodilators, anticoagulants, and hyperbaric oxygen.

Chapter 13 is devoted to respiratory obstruction after thyroidectomy, explained as "tracheal collapse" resulting from the loss of integrity of the cartilaginous rings. Of the estimated dozen or so cases of this frightful complication in the reviewer's experience in the last twenty years, edema of the tissues within the hypopharynx, larynx, and trachea have seemed to be more explicable of the condition than simple external pressure and compression, per se. The edema was thought the result of congestion inside the trachea following: (1) the surgical trauma to the outside of the trachea occasioned by the thyroidectomy, (2) the concomitant compromise of blood supply to the trachea, and/or (3) hematoma in the neck. The cases of true collapse I've seen have been due to fracture of the cartilages resulting from acute direct non-surgical trauma; or their destruction by neoplastic invasion.

The fifty chapters present the broad physiology, pharmacology, anatomy, pathology, physics, endocrinology, metabolism, chemistry, and physical diagnosis that make up the practice of medicine as it pertains to the specialty of anesthesiology. The theoretical, didactic, but especially the clinical topics discussed—among them cardiac arrhythmias, cardiorespiratory resuscitation, neurologic physiology, blood grouping and storing, pulmonary physiology and its pathology, hyperbaricity, etc., in addition to the two entities singled out above, make this book useful even to physicians in other disciplines.

Since Doctor Adriani is the Editor and not the author, I miss his inimitably clear, straightforward, all-meat authoritative manner of writing, free of typographical and grammatical errors.

CURTIS W. CAINE, M.D.

The Pediatrician's Ophthalmology. Edited by Sumner D. Liebman, M.D., Instructor in Ophthalmology, Harvard Medical School; and Sydney S. Gillis, M.D., Professor and Chairman, Department of Pediatrics, Tufts University School of Medicine. 352 pages with illustrations. St. Louis: The C. V. Mosby Company, 1966. \$19.50.

The purpose of this book is to provide for the pediatrician and general practitioner a text book of ophthalmology translated from ophthalmological jargon into terms which are understandable and applicable to his practice. Without exception this intent is carried out. For example, one chapter devoted to strabismus not only is an excellent discussion of etiologies and methods of correction but also includes those things which the ophthalmologist is likely to tell the patient. Methods of office examinations for strabismus are completely covered and applicable procedures for the pediatrician's use are clearly explained.

The panel of contributors is impressive, giving the entire volume an up-to-date authoritative treatment. At the same time each contributor should be complimented for not "over doing" simplification or rambling into specific details

announcing
important dosage
reduction

new

Norin

(norethindrone 1mg. \bar{c} mestranol 0.05mg)

lower cost
to patients

myl[®] 1

tablets

norethindrone — an original steroid from

SYNTEX 

LABORATORIES INC., PALO ALTO, CALIF.

For more information available from your pharmacist or Syntex representative.

which would find little use by the pediatrician in clinical pediatrics. Where there is any conflict of opinion in etiology or treatment of a condition, these disagreements are pointed out with sufficient facts to allow one to make his own decisions.

This review would be incomplete if proper praise were not given to the excellent illustrations, many of them in color, and useful tables such as the table on "Inherited Conditions That Manifest Ocular Pathology." The glossary of commonly used ophthalmic terms is also very helpful.

This book is a must for the pediatrician and should prove of great use to the general practitioner and ophthalmologist. It certainly will set a new standard and guideline for future textbooks in other specialties which are related to pediatrics, to provide the pediatrician with the same handling of the material.

WENDELL H. STOCKTON, M.D.

Emergency Care. Edited by Robert H. Kennedy, M.D. for the Committee on Trauma, American College of Surgeons. 120 pages with illustrations. Philadelphia: W. B. Saunders Company. \$2.00.

Someone has said that the most untreated disease in America is trauma. The Trauma Committee of the American College of Surgeons has throughout its history endeavored to make the medical profession and the public aware of the problems of trauma. These endeavors have reached not only into the prevention of trauma, but in the care of the trauma patient. This book on emergency care, which has been edited by Dr. Robert H. Kennedy, is an excellent supplement to our first-aid courses across the nation. It is written for lay people involved in trauma, such as ambulance personnel, law enforcement officers, etc. It covers all phases of trauma, including cardiac arrest, drowning, and even more importantly today, the transportation problems of injured. It has been shown that many lives are lost from the site of accident to the hospital, and this phase is covered quite well in this book. It is recommended for any review courses on first aid to be given as a text. The Mississippi Trauma Committee, under the chairmanship of Dr. Paul Derian, is to present a series of emergency care seminars throughout our state this year to present the contents of this work to our paramedical people.

RICHARD J. FIELD, JR., M.D.

Support Urged for 'Discover Mississippi'

The Mississippi Agricultural and Industrial Board has announced another campaign to "Discover Mississippi." The travel-at-home program encourages Mississippians to enjoy the vacation attractions of their own state.

Commenting on the program, Dr. James L. Royals of Jackson, secretary-treasurer and chairman of the Council on Scientific As-

sembly, said that "every member of the association and his family can get into the spirit of the program by planning to drive to the 99th Annual Session at Biloxi next month."

Dr. Royals pointed out the little-mentioned fact that an attendance of 1,000 at a Biloxi annual session of the state medical association involves as many as 600 medical families driving mean distances of more than 350 miles through the state for a quarter of a million miles of "tourist" travel. He said that he hopes the figure is doubled for the May 15-18 conclave on the Gulf Coast.



Pfizer Awards Medical Scholarships

Chas. Pfizer & Co., Inc., has announced that it will make available 94 medical student scholarships for the 1967-1968 academic school year.

The scholarship program provides each of the 94 medical schools in the United States with a \$1,000 scholarship. These scholarships are administered solely by the dean of each medical school, or by a committee established by him.

Selection of the recipient of the scholarship may be on the basis of scholastic record, financial need, or both. The scholarships are designed primarily to apply toward academic and subsistence expenses of one student in each of the medical schools in the United States.

Since their inception in 1962, the Pfizer scholarships have been accepted in each of the medical schools in the United States. Including this year's program, more than \$540,000 has been made available to these schools.

In addition to the scholarship program, Pfizer has also provided the American Medical Association's Educational and Research Foundation with \$400,000 in the past five years for the Foundation's student loan guarantee program.



Fun-in-the-Sun and Fellowship Events Punctuate Pace of Annual Session

Nearly a dozen fun and fellowship events dot the 99th Annual Session schedule as if to underscore that no Jack registered at Biloxi will be a dull boy with all work and no play. Beginning with the resort atmosphere of the refurbished Buena Vista Hotel and Motel, physicians and their families will intersperse fun in the sun with gourmet food, fellowship events, and the incomparable Coast climate.

"There are four days of 9-to-5 scientific and business meeting activities," said Dr. James L. Royals of Jackson, chairman of the association's Council on Scientific Assembly, "but there is change-of-pace recreation and family fun in direct proportion. We have tried to include something for every member of the doctor's family, mak-

ing for professional and personal enjoyment."

Dr. Royals said that "the frock-tail coat scientific session went out with the debate over whether pellagra was communicable or not. Physicians are demanding a measure of relaxation from the heavy pressures of practice when they take up the post-graduate education mantle."

The opportunity for learning will be ample, Dr. Royals observed, for six general sessions, 11 specialty societies, and other activities will offer a varied scientific menu of more than 50 speakers. A near-record scientific and technical exhibit brings in more than 100 additional "teachers" in physicians and professional service representatives of pharmaceutical firms.

Highlight social event of the May 15-18 meet



The swinging trombone of Jerry Lane, backed by his popular orchestra, will furnish dance music for the gala Caribbean A-Go-Go party on May 17 for

association members, their ladies, and guests. Inset shows pretty Betty Rogers, vocalist with the Lane organization.

comes on Wednesday evening when the traditional association party takes the theme of a Caribbean Holiday A-Go-Go. Two outstanding musical organizations, the Calypsonians and the Jerry Lane Orchestra, will furnish music in the manner of islands to the south from the happy hour through the no-curfew evening. The Gold Room complex with the Buena Vista's new Fountain Terrace will be the scene of the occasion.

Admission tickets will include the social hour, dinner, the show, and dancing, Dr. Royals said. Costumes in the Caribbean theme are in order for the fun evening, he added.

Five alumni events are slated with Ole Miss leading off on Monday evening, followed by Tennessee, Tulane, and Vanderbilt on Tuesday evening. In a more serious fellowship vein, Millsaps alumni and friends will enjoy a breakfast occasion.

Half a dozen specialty societies have banquet or luncheon sessions scheduled. Members of the Fifty



Bound for Biloxi on the next banana boat are the Calypsonians, featuring the rhythms of the islands-to-the-south. The group will play for the Wednesday evening party and present a show.

Year Club will be honored at a luncheon on Tuesday. Past presidents of the state medical association and Woman's Auxiliary will enjoy their respective breakfast meetings.

Dr. Royals said that more than 600 air conditioned bedrooms and suites are available in a three-hotel, four-motel complex under convention housing arrangements. The Buena Vista headquarters, now confirming reservations on a first-come-first-served basis, will offer more than 300 accommodations in the hotel and motel facilities. Three restaurants and the Olympic-size pool are added attractions for the headquarters.

Mexican Octuplets Die in a Day

The eighth and last of the Mexican octuplets died 13 hours and 50 minutes after birth at Mexico City, D.F., closing the third recorded chapter in the medical literature of the almost-never multiple birth.

Two other instances of octuplets are recorded as being born in Mexico in 1921 and in China in 1934. Dr. Pablo Rodriguez-Medina, attending pediatrician at the 20th of November Hospital, said that the infants were well formed although two months premature. The birth weight averaged about 540 gm per child. Each averaged about 30 cm in length with extremity measurements of about 6 cm. There were four males and four females.

The mother, 21-year-old Maria Teresa Lopez de Sepulveda, was reported in good condition. The father, Genaro Sepulveda, 24, is a white collar worker in Mexico City.

Dr. Rodriguez-Medina, who headed the team of six pediatricians attending the infants, said that the frequency of multiple births had increased with the use of oral contraceptives in Mexico. Mrs. Sepulveda was reported to have taken oral contraceptives until eight months ago.

Columbia University Will Study Medicare

The Social Security Administration has engaged the Columbia University School of Public Health and Administrative Medicine to study the extent of changes that may have occurred in the relationship between hospital-based physicians and hospitals since Medicare was enacted, according to Robert M. Ball, Commissioner of Social Security.

Ball said the study should provide information needed to evaluate Medicare policies and to serve as a basis for administrative and legislative planning.

The commissioner noted that the Medicare billing procedure does not require any change in hospital-physician relations but that it has nevertheless led to changes in some institutions, particularly where hospital-based physicians seek to become independent of the institution. Some do their own billing, Ball said, while others are considering lease arrangements under which they could carry out their specialties on hospital premises. Ball stressed that the Social Security Administration will play no

There are 24,300* undetected diabetics in Mississippi

Most of these are probably among patients over 40; the overweight; relatives of diabetics, and mothers of large babies. By the time polyphagia, polyuria, polydipsia, pruritus or other overt symptoms of diabetes appear, damage may have been done that could have been minimized. DEXTROSTIX® gives you a reliable blood-glucose estimate in 60 seconds.

Why Wait?



*Based on Statistical Report, U.S. Dept. Commerce, ed. 86, and Fisher, G. F., and Vavra, H. M.: Pub. Health Rep. 80:961 (Nov.) 1965.

Note: DEXTROSTIX is not meant to replace the more precise analytical laboratory procedures such as needed in glucose tolerance testing.



AMES COMPANY, Division Miles Laboratories, Inc., Elkhart, Indiana, U.S.A. 42867

Ames

part in the negotiations between hospitals and the doctors who want to change their arrangements.

The Columbia staff will review the status of the two largest hospital-based physician groups—radiologists and pathologists—prior to the beginning of the Medicare program on July 1, 1966, and following that date. The study will include a nationwide sample of hospitals and several in-depth case studies of selected hospitals.

Ball said that the study will be conducted by a full-time research faculty group in the School of Public Health of Columbia University, under the direction of Mr. Frank van Dyke, Professor of Administrative Medicine.

Blue Plan Re-elects, Hears Annual Reports

A review of 1966 operations and election of directors highlighted the 20th annual meeting of the board of directors of Mississippi Hospital and Medical Service, the Blue Cross-Blue Shield plan.

Named to the board as new directors were Dr. S. H. McDonnieal, Jr., Jackson internist; Reuben S. Johnson, Meridian hospital administrator; Evelyn Gandy of Jackson, commissioner of Public Welfare; Purser Hewitt of Jackson, newspaper editor; and two others, Monsignor Edward E. Michelin and William O. Stanley, both of Jackson.

Dr. McDonnieal was nominated for the post by the House of Delegates at the association's 98th Annual Session in 1966 along with Drs. Lamar Arrington of Meridian, Andrew K. Martinolich, Jr., of Bay St. Louis, and Walter H. Simmons of Jackson.

Other MSMA-nominated directors who continue to serve are Drs. S. Lamar Bailey of Kosciusko, R. B. Caldwell of Baldwin, M. Q. Ewing of Amory, G. Swink Hicks of Natchez, George H. Martin of Vicksburg, Joseph B. Rogers of Oxford, T. E. Ross, Jr., of Hattiesburg, and James G. Thompson of Jackson.

The board consists of 36 directors with 12 each from hospitals, the general public, and medical profession.

Re-elected as officers of the board of directors were Owen Cooper, Yazoo City industrialist, chairman; Dr. A. V. Beacham of Magnolia, director of the Alcohol Beverage Control Division, vice chairman; and Dr. J. C. Woosley of Jackson, president.

President Woosley said that the combination Cross-Shield plan paid about 300,000 claims in

1966 totaling more than \$23 million. Hospitals received \$16.7 million, physicians were paid \$3.6 million, and claims under special coverage amounted to \$2.7 million. As fiscal intermediary for Part 1-A of Medicare, the representative of hospitals providing services to those over age 65, the plan processed almost 16,000 claims to the tune of \$3.8 million in benefits. Enrollment in the plan hit 455,000 in 1966, Dr. Woosley said.

Hospital directors continuing to serve on the Board were: H. Dean Andrews of Vicksburg; T. W. Crowley of Brookhaven; Harry C. Cutler of Meridian; Surry A. Grafton of Picayune; S. Earl Grimes of Yazoo City; R. B. Harrington of New Albany; Robert A. Ivy of Columbus; D. A. Lingle of Greenville; Paul J. Pryor of Jackson; and C. P. Wimberly of Gulfport.

Public directors continuing to serve on the Board were: Earl W. Banks, Sr. of Jackson; T. B. Fatherree of Jackson; Dr. William G. Giles of Starkville; T. Harvey Hedgepeth of Jackson; Charles D. Maddox of Kosciusko; Jr. Murphy Thomas of Tupelo; and C. C. Whittington of Greenwood.

AGS-Lederle Grants Are Available

Three \$1,800 grants to encourage resident physicians to devote more time to the study of medical problems of the aging have been renewed by the American Geriatrics Society. The grants—in-inaugurated by Lederle Laboratories in 1962—will supplement the salaries the physicians receive. They will cover the period between July 1967 to June 1968.

In announcing the grants, Dr. Edward J. Lorenze, president of the American Geriatrics Society, said that much more research is needed if we are effectively to meet the problems posed by an increasing number of aged in our population. He noted that by 1970 there will be 20 million Americans 65 or older.

Lederle's Medical Director, Dr. Benjamin W. Carey, said that a great deal of basic research is needed to give us more understanding of what happens in growing tissues, what makes us age, and to what extent we can actually prevent the manifestations of aging.

Application for the grants should be addressed to the Chairman, Fellowship Committee, American Geriatrics Society, 10 Columbus Circle, New York, N. Y. 10019. Deadline for applications is June 1, 1967. Announcement of the awardees will be made at the AGS annual meeting June 16-17 at Atlantic City.

Does she really care?
Is she alert, encouraged,
positive and optimistic
about getting completely
well soon?
Or has she given in to
the demoralizing impact
of confinement, disability
and dependency?
When functional fatigue
complicates convalescence,
Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that can often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic®

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Dr. Sutherland Is New Board Member

Dr. C. G. Sutherland of Jackson has been named a member of the State Board of Nurse Examiners by Governor Johnson. He will serve the unexpired term of Dr. William E. Lotterhos of Jackson who resigned to accept an appointment on the newly created State Board of Physical Therapy.

A veteran of service in medical organization, Dr. Sutherland has held elected posts in the Central Medical Society and served as secretary-treasurer of the Mississippi State Medical Association. He is a former assistant professor of obstetrics and gynecology at the University of Arkansas School of Medicine and currently holds an appointment at the University Medical Center. He is engaged in private practice of his specialty in Jackson.

Title XIX Meets Cover State

The association's series of Title XIX regional information meetings rolls to a climax with the sixth conclave set for Oxford on April 6. Dr. Joe B. Rogers, District 2 Trustee, heads the arrangements committee. Members from the DeSoto County and North Mississippi medical societies will sponsor the event.

Slated to summarize in behalf of the association is Dr. Howard A. Nelson of Greenwood, past president of the association and incumbent speaker of the House of Delegates. Members of the legislature from the two society areas, dentists, and hospital administrative personnel and trustees will be among the guests.

In five regional meetings begun on February 21, the information team has traveled to Natchez, Hattiesburg, Biloxi, Greenwood, and Tupelo, covering Districts 1, 3, 4, 7, 8, and 9. The Oxford meeting covers District 2.

Decisions were made in Districts 5 and 6 to postpone the meetings until later in the year, according to information from Drs. John B. Howell, Jr., and Lamar Arrington, Trustees for the two districts.

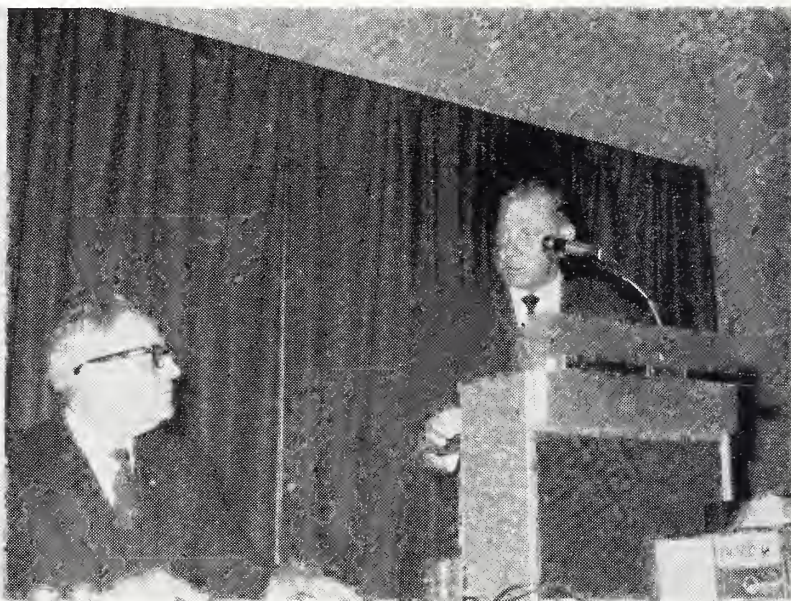
Association spokesmen said that interest in the meetings has been high and that the team has been warmly received. Highlight of each regional meeting has been the question and discussion periods. The highly technical law is explained in two presentations making use of 52 slides in color. The association's views are summed up by a top officer.

Dr. James T. Thompson, association president, presented the address at the Natchez, Hattiesburg, and Biloxi meetings. Dr. Nelson spoke at Greenwood and Tupelo and is slated to appear at Oxford.

Association spokesmen said that the team will stand ready to present additional programs as may be desired by local medical societies. The program is a less-than-an-hour package of the three presentations. The team will answer questions at the pleasure of the audience.



Top leaders in medicine and government have turned out for the state association's series of Title XIX regional information meetings. Left, Speaker of the House of Representatives John Junkin chats with



those attending the Natchez meeting. Right, Trustee G. Swink Hicks, presiding, makes a point with President Thompson, seated at head table.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761



Togetherness....

...can be rough when epidemics of nausea and vomiting strike a family. Emetrol offers prompt, safe relief. It is free from toxicity¹ or side effects^{2,3} and will not mask symptoms of serious organic disorders.

1. Bradley, J. E., *et al.*: J. Pediat. 38:41 (Jan.) 1951.
2. Bradley, J. E.: Mod. Med. 20:71 (Oct. 15) 1952.
3. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311 (Feb.) 1953.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol[®]
phosphorated carbohydrate
solution
emesis control

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

*The
fast-disintegrating
uncoated tablet
gives relief in
15 minutes*

Each tablet contains:

Potassium Iodide.....	195 mg.
Aminophylline.....	130 mg.
Phenobarbital, Caution: May be habit forming....	21 mg.
Ephedrine HCl.....	16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of
water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



Dr. Davis Is Delegate to Conference

An invitational conference of 200 physicians and health leaders meets April 6-7 at Chicago as the American Medical Association sponsors its First National Conference on Emergency Medical Services. The state medical association will be represented by Dr. J. T. Davis of Corinth, a general surgeon and member of the Board of Trustees.

Dr. I. E. Hendryson of Denver, AMA trustee and chairman of the conference, said that "far too many communities are without proper transportation for the ill and injured, don't insist on adequate training of ambulance drivers and attendants, don't provide necessary communications, and have not assured themselves that their emergency facilities are providing the best possible medical care."

Aim of the conference, Dr. Hendryson said, is to stimulate high quality, comprehensive emergency medical services throughout the United States. Participants are expected to define what constitutes good emergency care and consider means for implementing it in all communities through combined efforts of medical, governmental, voluntary health, and safety groups, Dr. Hendryson said.

In addition to prominent authorities, including those representing the American College of Surgeons, AMA President Charles L. Hudson of Cleveland and Board of Trustees Chairman Wesley W. Hall of Reno, Nev., will address the conference.

Dr. Lull Is New Illinois Society Exec

The executive secretary of one of the five biggest state medical associations in the nation is a member of the Mississippi State Medical Association. He is Dr. George F. Lull of Chicago who was recently appointed to the top executive post in Illinois by the Board of Trustees of the Illinois State Medical Society.

Dr. Lull, distinguished retired Deputy Surgeon General of the U. S. Army and former Secretary and General Manager of the American Medical Association, is the only living honorary member of the Mississippi State Medical Association.

The announcement said that Dr. Lull has agreed to serve in the post as successor to Mr. Robert L. Richards in an interim capacity until the Trustees can appoint a new executive.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 595-1151

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

Hill Crest
HOSPITAL
BIRMINGHAM, ALABAMA

*When the problem
is only skin deep*

USE 'POLYSPORIN'[®] brand POLYMYXIN B-BACITRACIN OINTMENT

**for topical antibiotic therapy with minimum
risk of sensitization**

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in 1/2 oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.



BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.



HOUSE OF DELEGATES / Continued

staff members in raising funds for such institutions, and the Third National Congress on Medical Quackery was authorized.

The House urged state medical associations to oppose any legislation which would permit optometrists to engage in the diagnosis and treatment of disease or injury of the eye, such legislation being deemed detrimental to the public interest. The use of LSD was strongly condemned as was compulsory generic prescribing. A position of opposition to legislation similar to the Hart bill was adopted.

Las Vegas Clinical Convention. The House of Delegates was again in session during the 20th Clinical Convention of the AMA at Las Vegas, November 27-30, 1967. Education for family practice, billing and certification procedures under Public Law 89-97, revisions in the Selective Service System as relates to physicians, compensation of house officers, and medical ethics were among the principal items of business and policy.

The association was represented by Drs. Culpepper and Hill, Dr. Twente being unable to attend. Dr. Charles L. Hudson of Cleveland, AMA president, urged in his address that there is a need to improve existing services and to establish new medical services for the total population of the United States. He said that "it is among the needy and formerly indigent that . . . we must show interest, initiative, and enterprise."

The formal report of the Ad Hoc Committee on Education for Family Practice, a milestone document, was presented to the House of Delegates. Dr. William E. Lotterhos of Jackson, a former chairman of the AMA Section on General Practice and now a board member of the American Academy of General Practice, served as a member of this committee.

The report, since published, urged that major effort be exerted to encourage development of new programs for education for family practice, that medical schools and teaching hospitals develop model training programs, that new sources of financial assistance for these projects be found, that recognition and status equal to those accorded other medical specialties be given family practitioners, that the practice environment for this specialty be improved, that careful study be given pre-medical education curricula in preparation for family practice, and that more medical students be thereby encouraged to enter this type of practice. In addition, a full day's hearing was conducted on the Millis Report, that of the Citizens Commission on Graduate Medical Education. This report is not yet formally before the House of Delegates.

For a second time, the House expressed disapproval of the necessity to certify and recertify Medicare patients and asked that carriers, fiscal intermediaries, and hospital associations assist in securing a repeal of this part of the law.

In a critical report of doctor-draft, the Council on National Security cited three basic flaws in the Selective Service System: (1) There is no medical group directing the allocation of physicians, (2) There is no medical group directing the priorities to be used for calling physicians to active duty, and (3) there is a need for a stronger medical voice within the Department of Defense. The report proposed that these flaws be eliminated by federal legislation establishing a National Commission on Health Resources and Medical Manpower.

Expanding on policies relating to prescription drugs, the House stated that "the present policy of the American Medical Association is that physicians should be free to prescribe drugs generically or by brand name for all of their patients, whether they are paying, Medicare, or indigent patients, the primary consideration being the best interests of the patients. Medical considerations must be paramount in the selection of drugs. In addition, the physician also has an obligation to be mindful of the economic consequences of the treatment he prescribes."

In the same vein, the House adopted a report of the Judicial Council stating that "medical considerations, not cost, must be paramount when the physician chooses a laboratory. The physician who disregards quality as the primary criterion or who chooses a laboratory because it provides him with low cost laboratory service on which he charges the patient a profit, is derelict in not acting in the best interests of his patient."

The House re-enforced its prior policy utterances on the cult of chiropractic, taking notice of the Supreme Court decision in the Louisiana case. A 1956 policy statement on admission of alcoholics to general hospitals was reaffirmed, and medical staffs and hospital administrators were asked to look upon these patients as having medical problems. Insurance companies and prepayment plans were urged to remove unrealistic limitations on the extent of coverage afforded for the treatment of alcoholism.

To clarify existing AMA policy, the House adopted an eight point statement on payment for professional medical services. The statement affirmed it proper for a physician to establish his fee with recognition of the fact that a duly constituted committee of his peers may appropriately review and pass upon the equity and justice of the charge; that it is proper for third parties to make

payment in behalf of patients with recognition that the service has been rendered to the patient and that he is liable for the payment; that it is proper for a physician to work cooperatively with other physicians in a team approach to medical service with recognition that each physician is entitled to separate compensation and that the patient should clearly understand this method of charging; that it is proper for the physician who directs care by a physician-in-training be paid for his service; that a physician should not enter into a contract whereby a hospital acts as the agent for the physician unless it is with the consent of the physician and the medical staff; that physicians, collectively in hospitals, may properly establish special medical staff funds which must be wholly under their control to support and disburse as they agree; that fees for professional medical services are properly paid only to the responsible physician and may not be appropriated by others; and that the physician is the sole arbiter as to the ways in which he may dispose of his professional income, without duress, consistent with law and medical ethics.

The House stated that compensation of hospitals for the services of interns and residents under Part 1-A of Medicare is compatible with the organization and administration of graduate medical education. The House further recommended that compensation of house officers be determined locally in accordance with state law, ethical principles, and medical policy.

The House, in other actions, expressed disapproval of the "dual fee" system in determining the rate of payment for medical services based upon the type of practice. The delegates urged continuing, vigorous effort to dissuade local officials from demanding that physicians sign compliance statements which are not required by law. The Council on Legislative Activities was asked to pursue further improvements in the Self-Employed Individuals Tax Act (Keogh act) to the point of equating benefits thereunder with those now enjoyed by corporate employees. The Bureau of the Budget was asked, through another action, to review the cost accounting system for Veterans Administration hospitals to permit comparison with cost accounting of community hospitals. Each hospital board of trustees was asked to have at least one voting member who is a doctor of medicine and who is either elected or appointed by the medical staff.

The principle of free choice of physician under Title XIX was endorsed, and collaboration among physicians, social workers, and attorneys in behalf of service for unwed mothers and their children was urged.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Recent Amendments. At the 98th Annual Session in 1966, The House of Delegates adopted an amendment to Article IV, Section 1, of the Constitution and amendments to Chapters I and XII on the table. Accordingly, your council will be prepared to conduct hearings on any proposed only three degrees of membership, Active, Emeritus, and Associate. These amendments became effective with the 1967 membership year.

99th Annual Session. At the close of business at the 98th Annual Session, there were no pending amendments to the Constitution or By-Laws lying on the table. According, your council will be prepared to conduct hearings on any proposed amendment which may come before the House of Delegates at the present annual session.

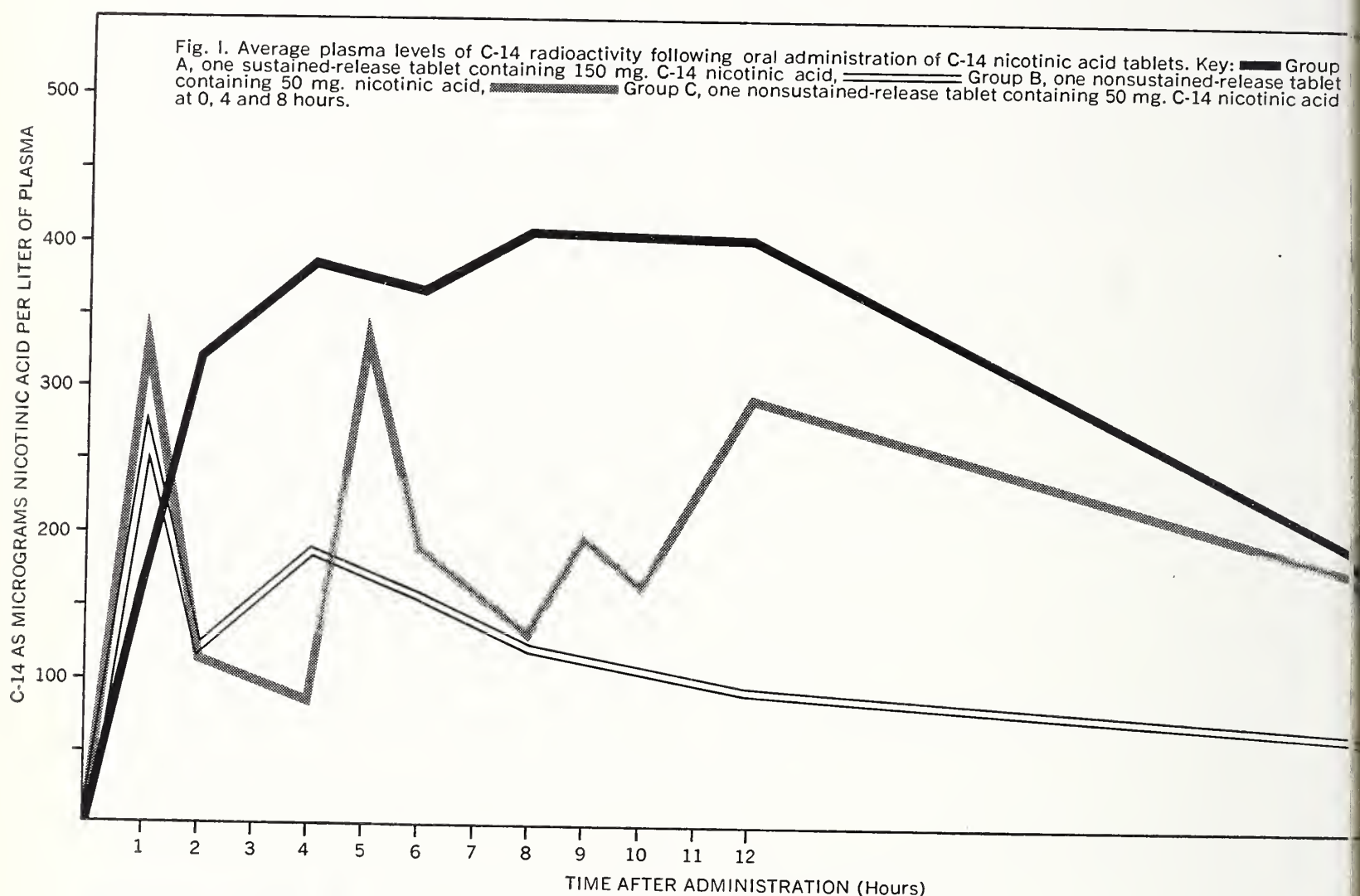
REPORT OF THE BOARD OF TRUSTEES

Organization and Duties. The Board of Trustees is the executive and governing body of the association during vacation of the House of Delegates. It is additionally charged with duties and responsibilities prescribed by law for directors of corporations. In the discharge of these duties, the Board shall have conducted six formal meetings over a period of seven meeting days since the 98th Annual Session when this report is considered by the House of Delegates. The Board met in May, August, and December of 1966, and in February of 1967. Meetings are scheduled for April and May of 1967. Matters treated in this annual report include referrals from the House of Delegates and those items relating to management and policy functions in connection with the Board's responsibilities.

Referrals from the House. Matters referred by the House of Delegates at the 98th Annual Session and those actions by the House requiring Board action included:

(a) *Irregular Practitioners.* The House adopted a recommendation that "the State Board of Health rigorously enforce the Medical Practice Act to the end that all irregular practitioners who may be in violation thereof be prosecuted as provided by law." In this connection, the Board formally transmitted to the State Board of Health its studies and recommendations on judicial actions against the cult of chiropractic, especially as decided by the U. S. Supreme Court in the case of *England v. Louisiana State Board of Medical Examiners*. Continued close liaison with the State Board of Health was maintained with reference to the unlawful selling of nostrums and other illegal practitioners. The Executive Officer of the State Board of Health has also reported in detail to the Board

Sustained circulatory, respiratory and cerebral stimulation for



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

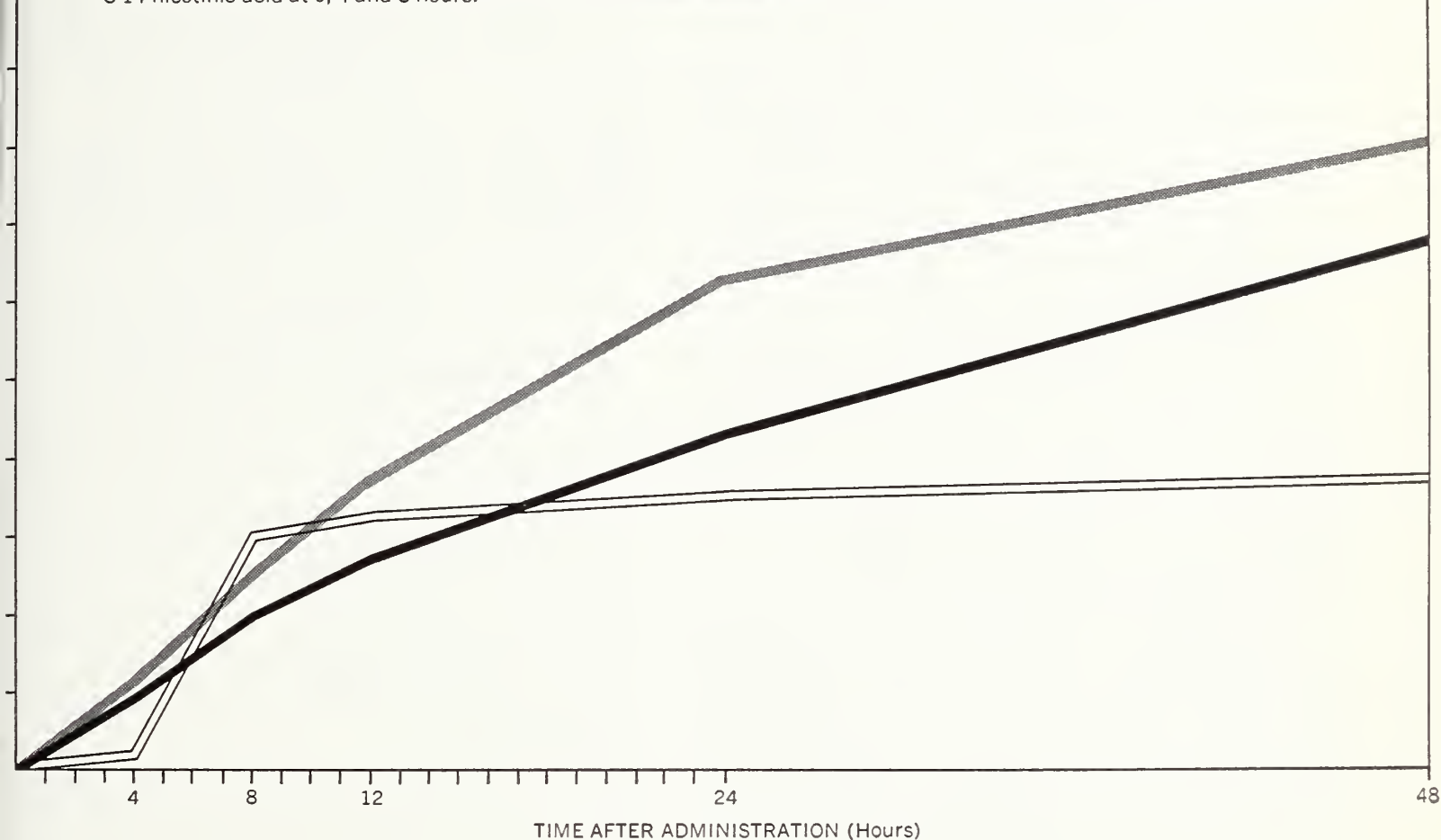
mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT let every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation with a minimum amount (if any) of "flushing." cerebrovascular circulation is complemented by tylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ed and debilitated

Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, anxiety and irritability are reduced. A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-controlled nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

"First with the Retro-Steroids"

PHILIPS ROXANE LABORATORIES

Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

HOUSE OF DELEGATES / Continued

of Trustees on investigations of chiropractors, faith healers, out-of-state nurses in community action health programs, and of pharmacists in two instances.

(b) *Federal Narcotics Stamps.* In further development of the requirement that members of the association must possess a valid federal narcotics stamp with certain stated exceptions, the Board of Trustees has caused the standard form for application for membership to be revised to reflect this information, requiring either the number of the stamp or a statement from the applicant why he possesses none. Additionally, component medical societies have been specifically notified of this requirement as a condition of membership. When a physician is placed on probation or suffers revocation or suspension of his license for this (or any other) reason, this information is published to component medical societies and state officers in the Monthly Directory Supplement.

(c) *Membership.* The degree of association membership designated as scientific was abolished by the House of Delegates at the 98th Annual Session and became finally effective with the beginning of the 1967 association year. There are now only three degrees of membership: Active, Emeritus, and Associate. The By-Laws provide for the election of applicants solely on a basis of personal and professional qualification.

(d) *Council on Scientific Assembly.* The By-Laws were revised to require election of scientific section secretaries for terms of three years effective with the 99th Annual Session. To fulfill requirements of the By-Laws as to staggered terms for the seven section secretaries, it will be necessary to elect two for one year, two for two years, and three for three years at the 99th Annual Session. As before, section chairmen will be elected for terms of one year each. The amendment will enlarge the council to 15 members, thereby adding seven new members to the House of Delegates.

Labeling of Prescriptions. The AMA Council on Drugs requested each state medical association to take a formal position on identifying drugs prescribed on the prescription label. Since 1963, the AMA council has taken the position that physicians should so authorize the pharmacist, the only exception being when such disclosure would be detrimental to the well-being of the patient.

In advocating this practice, the AMA council believes that the patient has the right to be informed about his illness and medications prescribed, that the information is valuable in the continuity of care, that it is useful in event of accident or overdosage, that it is a convenience to

physicians, that it helps prevent error on the part of the patient who is taking two or more different drugs simultaneously, and that it is useful if it became necessary to issue a warning against a drug.

Against labeling are arguments that it may lead to self-medication, that it may confuse or trouble the patient, that the practice reduces the stature of the physician and his medication to that of an over-the-counter preparation, that labeled containers may be used for other drugs with disastrous results, and that labeling lends itself to channeling drugs into illicit markets.

The Board believes that prescription drugs should be identified on the label when the prescribing physician so directs and should not be labeled in the absence of such instructions.

State Board of Health. In June 1966, the Governor of Mississippi, acting on nominations made by the House of Delegates under law, reappointed Dr. Joseph G. McKinnon of Hattiesburg to a six year term on the State Board of Health and appointed Dr. H. C. Ricks, Sr., to a full term. The Governor did not act at that time to fill the vacancy in Public Health District 7 occasioned by the death of Dr. S. E. Field of Centreville. One nominee for the post asked that his name be withdrawn, and the Board of Trustees, acting under its authorities, made another nomination. The Governor then appointed Dr. G. Swink Hicks of Natchez to a full term, thereby filling all vacancies then existing. Under actions of the 1966 regular session of the legislature, an optometric member has been appointed. By law, this member may not participate in activities of the board relating to medical licensure.

Board of Physical Therapy. The 1966 regular session of the legislature enacted a physical therapy licensure law, and the measure was supported by the association. The act provides for a five member board consisting of two physicians and three physical therapists. The law contains no provisions for making nominations for appointees, but the Governor is required to appoint physicians from the membership of the association. Physicians appointed to the board are Drs. William E. Lotterhos and Louis A. Farber of Jackson.

Committees of the Board. The Board of Trustees is assisted in its work by four constitutional and eight *ad hoc* committees. For reporting purposes, four of the eight councils report to the Board.

(a) *Advisory to the Auxiliary.* Officers of the Woman's Auxiliary consult the committee from time to time on programs and policies. One joint meeting was conducted by the Board of Trustees during the year with the committee and Auxiliary president. The Auxiliary project for the 1966-67

**Many overweight patients
can benefit from the appetite
control provided by the sustained
anorexigenic-tranquilizing
action of BAMADEX SEQUELS:
anorexigenic action of
amphetamine; tranquilizing
action of meprobamate;
prolonged action through
sustained release of
active ingredients.**

Bamadex® Sequels®

DEXTRO-AMPHETAMINE SULFATE (15 mg.) SUSTAINED RELEASE CAPSULES
WITH MEPROBAMATE (300 mg.)

**to help establish
a new dietary pattern**

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies. **Side Effects:** Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.



LEDERLE LABORATORIES

A Division of American Cyanamid Company,
Pearl River, New York

695-6

HOUSE OF DELEGATES / Continued

association year was health careers recruitment with emphasis on nursing careers.

(b) *Grievance.* The committee processed written complaints under policies requiring initial referral to the component medical society concerned through the appropriate member of the Board of Trustees. The committee considered no cases of original jurisdiction and was not called upon to sit in an appellate capacity. The Board is gratified at the low frequency of complaints and with action taken upon such complaints by component medical societies.

(c) *Publications.* This committee, consisting of three appointed members and the three editors, conducts the largest single association program, that of publishing the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. Continuing the strong trend established in 1965, the seventh year of the JOURNAL showed gains in advertising and scientific-editorial content. A notable special issue on nuclear medicine gained wide acclaim. Increased advertising revenues have enabled the committee to expand state and local news services almost threefold. The Board commends the editors and committee for their services to the scientific work of the association and for their successes.

(d) *Medicine and Religion.* Working closely with the AMA Department of Medicine and Religion, the committee is reviewing and revising its program of seeking closer communication between medicine and clergymen in the interest of the whole patient. The committee was represented at the 1967 Conference on Medicine and Religion sponsored by AMA.

(e) *State Medicare Review Board.* Growth of the armed services by reason of the Viet Nam War and extension of benefits to retirees are resulting in growth of the Dependents' Medical Care Program. To assure a consistently high level of service to physicians, the Medicare Department in our headquarters has been expanded. The Board appointed a fourth member to the Review Board, an orthopaedic surgeon. The Board extends appreciation and commendation to the Review Board for further improvement in the program and for its uncompensated service to the profession.

(f) *Other Committee Activity.* The Committee on Medical Aspects of Driver Limitation continues to work with the Mississippi Highway Safety Patrol, and the examination program by private physicians has accelerated. We continue to find satisfaction in the Patrol's seeking the advice of the association in these medical matters, and we have assured the continuing services of the committee in the environment of cooperation. The Board of Judges for the MSMA-Robins Award consists of the three association vice presi-

dents, but the Board permitted one to disqualify himself this year because his associate was among the nominees. Provision was made for another member. The 1967 awardee will be announced at the adjourned meeting of the House of Delegates.

Because of little activity of interest to medicine in the 1966 special session of the legislature, the Committee on Legislative Liaison was not reactivated. The Board has traditionally followed the practice of appointing this *ad hoc* group on regular legislative years. A liaison committee with Blue Cross-Blue Shield, consisting of the three Trustees who are also members of the board of directors of the Mississippi Hospital and Medical Service, was appointed.

At the request of the Mississippi State Bar, a three member liaison committee was appointed on an *ad hoc* basis until such time as a change can be made to make this a committee of the Judicial Council.

Legislation. The 1966 regular session of the legislature was conducted from January 4 through June 17, 1966. A total of 2,100 bills was introduced, and 890 were enacted into law. About 150 bills related to matters of health and medical interest. Without duplicate introductions, these totaled 85 bills of which 31 passed and 54 failed. Of these, the association supported 20, took no position on 53, and opposed 12.

Only three bills opposed by the association were passed. Ten bills supported by the association were passed.

Among important enactments originated and/or supported by the association were the Battered Child Law, the defining of blood banking and transfusion procedures as a service and not a sale, licensure of physical therapists, transferring the duties of the State Medical Education Board to the Board of Trustees of Institutions of Higher Learning, increasing salaries for medical service at the Parchman State Penitentiary, codifying law concerning consent to surgery, providing for donation of transplantable portions of the human body, inauguration of a plasma-phoresis program at Parchman, stiffening of the fireworks law, and providing for payment for medical services to prisoners by county boards of supervisors.

An amendment to the law providing for a new method of electing the dental member to the Board of Health, introduced by the Mississippi Dental Association, resulted in a further amendment placing an optometrist on the State Board of Health. Two other enactments in behalf of optometrists, one on insurance benefits and the other on applicants for visual assistance, were passed over the association's opposition.

Proposals for licensure of chiropractors, creation of a basic science board, mandatory PKU

ting, and three less desirable versions of the Attered Child Law were defeated, and the association actively opposed each.

The Emergency Medical Care Unit was operated at the State Capitol during the regular and special sessions.

Auxiliary Communications Program. Officials of the Woman's Auxiliary are deeply concerned about a lack of communication with their members, and they desire to establish a publication which would inform their members and give them greater incentive for involvement in programs. A three-issue-per-year publications schedule has been suggested, and the Advisory Committee to the Woman's Auxiliary concurs in the proposal. The Board of Trustees, therefore, recommends that the association assist the Woman's Auxiliary financially in this project in furnishing up to \$500 per year for this purpose. The newsletter-type publication would be issued during the summer, in January prior to the Auxiliary Executive Board meeting, and prior to the annual session. The Board believes that the publication will assist in promoting membership gains which are needed and in increasing attendance at the annual session.

Other Actions. At the invitation of the Mississippi School Health Service, Dr. W. M. Dabney of Crystal Springs was appointed by the Board of Trustees to the Interagency Committee on Smoking and Health. The Board arranged for representation of the association at the Third National Congress on Medical Quackery, the First National Congress on the Socioeconomics of Health Care, and at the first AMA Conference on Emergency Medical Services.

Organization of the Board. Dr. Lyne S. Gamble of Greenville was welcomed as a new member of the Board, succeeding Dr. C. W. Patterson of Rosedale as District 1 Trustee. During the six meetings, there were no absences. 1966-67 officers of the Board are Drs. John B. Howell, Jr., chairman; Lamar Arrington, vice chairman; and C. D. Taylor, Jr., secretary.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Organization and Duties. The Council on Medical Service is a constitutional body of the House of Delegates. It is charged with the responsibility of ascertaining and studying all aspects of medical care in Mississippi. Under its jurisdiction there are assigned the activities of the association in medical service, emergency service programs, indigent care and allied medical agencies. The council is assisted in its work by three constitutional committees and three *ad hoc* committees. Programs, studies, and activities of the council's several committees during the 1966-67 association year embraced a wide range of subject areas and policy development. These were:

Committee on Mental Health. This committee has continued to monitor the Mississippi Mental Health and Mental Retardation program established by act of the Mississippi Legislature during its 1966 Regular Session. The concept of regional mental health and mental retardation centers located in nine geographic regions of the state has been enthusiastically received in certain communities in Mississippi during the past year. Based upon prior policies of the association's House of Delegates to the effect that personnel recruitment and training should be given first priority in establishing the mental health and mental retardation program in Mississippi, the committee felt it desirable to restate this policy in the light of advising against possible hasty establishment of service facilities before necessary staffing personnel were available. This was done in a letter to the secretaries of the association's component societies in December of 1966. An editorial in this connection titled "The Challenge of People: Key to Care of the Mentally Ill" was authored by the committee's chairman and published in the February, 1967, issue of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. The committee recommends that a mental health training center be established in conjunction with the University Medical Center at the earliest possible time.

Committee on Occupational Health. This committee has continued its study of occupational health programs in small plants in Mississippi. The study will be the subject of a special supplemental report to the House of Delegates at the 99th Annual Session.

Committee on Maternal and Child Care. The committee has continued its study of maternal deaths in Mississippi. During the past year the committee has reviewed and evaluated 38 maternal deaths occurring in Mississippi. As of January, 1967, the committee has sent out 504 inquiries on maternal deaths since its study began in January, 1958. Replies have been received in 421 or 83.5 per cent of these cases. In an effort to retain and improve the response level to its inquiries, the committee during the past year wrote each chief-of-staff of licensed general acute care hospitals in Mississippi to inform them of the committee's study and forward a copy of the "AMA Guide for Maternal Mortality Studies."

Supplementary to its studies, the committee has presented the following scientific papers in the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION: "Amniotic Fluid Embolism: The Non-Fatal Case" (November, 1966); "Maternal Mortality in Mississippi During 1962" (February, 1966); "Maternal Mortality in Mississippi During 1963" (May, 1966); "Maternal Mortality in Mississippi During 1964" (August, 1966).



You can't set her free. But you can help her feel less anxious.

You know this woman.

She's anxious, tense, irritable. She's felt this way for months.

Beset by the seemingly insurmountable problems of raising a young family, and confined to the home most of the time, her symptoms reflect a sense of inadequacy and isolation. Your reassurance and guidance may have helped some, but not enough.

SERAX (oxazepam) cannot change her environment, of course. But it can help relieve anxiety, tension, agitation and irritability, thus strengthening her ability to cope with day-to-day problems. Eventually—as she regains confidence and composure—your counsel may be all the support she needs.

Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax[®]
(oxazepam)



Wyeth Laboratories
Philadelphia, Pa.

HOUSE OF DELEGATES / Continued

In connection with its 1964 report, the committee notes with serious concern that maternal mortality in Mississippi during that year was the highest since 1960. The committee respectfully invites the attention of physicians in Mississippi to this published report. It should be noted, too, that Mississippi continues to have the highest maternal mortality rate in the United States.

In an effort to improve and make a more useful presentation of the data collected in its studies, the committee initiated a project in the latter part of 1966 to reduce all its study data to IBM. This will involve the 421 maternal deaths studied by the committee thus far and all future maternal deaths. The committee is also reviewing a postgraduate educational project conducted by the Michigan State Medical Society's Committee on Maternal and Child Care with a view towards making specific recommendations in this connection for implementing the program in Mississippi.

Committee on Nursing (ad hoc). This committee was appointed by the council during the 1966-67 association year to establish a program of active liaison with the Mississippi Nurses Association. The committee will serve as a forum for physicians and nurses to discuss their mutual interests and problems. Your council is happy to report that the Mississippi Nursing Association shares the council's enthusiasm for the concept and activities of this committee.

Health Insurance Benefits Advisory Committee (ad hoc). In accordance with its constitutionally assigned duty to "ascertain and study all aspects of medical care in Mississippi . . . and act as a factfinding and advisory body of the association," the council appointed this committee to establish close liaison with all public and private agencies concerned with the operation of the Medicare program (Public Law 89-97) in Mississippi. The committee will serve as a factfinding and advisory committee to the council and recommendations and reports resulting from the committee's activities will be presented to the House of Delegates.

Committee on Blood and Blood Banking (ad hoc). This committee continues to monitor all aspects of blood banking and transfusion service, blood products, and professional and socioeconomic policy in this connection. The committee was gratified to see passage of House Bill 230 during the 1966 Regular Session of the Mississippi Legislature. This bill to define blood banking as a service and not a sale was recommended by the committee. It is believed that this law will have a beneficial effect on blood banking activities in Mississippi.

The committee has also followed with great

interest the enactment and implementation of Senate Bill 1643, 1966 Regular Session of the Mississippi Legislature. This law set up a blood and blood plasma program at the Mississippi Penitentiary at Parchman. Contract for the program was awarded to the Cutter Laboratories of Berkeley, California. The committee met with representatives of the Cutter Laboratories who presented the program proposed for the Mississippi Penitentiary and asked the counsel, guidance, and support of the association in this regard. Based upon the committee's review and study of this program, the council recommends full and complete support for the program.

Activities of The Council. In addition to the work of its several committees, the council has considered and acted upon items referred from the House of Delegates and items of medical service interest resulting from actions of the AMA House of Delegates. These will be the subject of a special supplementary report to be presented to the House of Delegates.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Organization and Duties. The Council on Scientific Assembly is a constitutional body of the House of Delegates. It is charged with the responsibility of planning the annual sessions of the association to include all scientific activity and the programming and scheduling of annual session events. The council membership consists of the chairmen and secretaries of the several scientific sections and the secretary-treasurer of the association.

99th Annual Session. Your Council on Scientific Assembly feels that the 99th Annual Session represents a significant event in the 111 year history of the association. This meeting marks the third consecutive year that the association has met under the revised format of general scientific sessions approved by the House of Delegates in 1964. Your council has profited from this prior experience and believes that this annual session's program represents a full implementation of the House of Delegates' intent.

In addition to arranging the scientific program to the extent possible to avoid simultaneous sessions, your council has also scheduled business meetings, including reference committee hearings, so that they do not conflict with the formal scientific program. This latter innovation was initiated at last year's annual meeting, and your council is happy to report that there was a noticeable increase in attendance at reference committee meetings which it is felt resulted from this new scheduling format.

Scientific Film Program. In an effort to vary

and strengthen the association's scientific activities, the council has initiated a scientific film program for the 99th Annual Session. Scientific films will be shown prior to the morning scientific sessions on Tuesday, Wednesday, and Thursday, and the afternoon scientific session on Tuesday. These films will be related to the general scientific sessions to follow.

Special Symposiums. For the past several years, the council has arranged a special symposium on a topic of general medical interest for presentation in the Wednesday morning program at annual sessions. Your council feels that the symposiums have been highly successful but that they have perhaps served their usefulness for the present time. At the 99th Annual Session, therefore, this period of time has been devoted to the general scientific program. Future symposiums will be scheduled based upon their interest and relationship to the general scientific program.

Specialty Societies and Attendance. Your council is aware of the competition for attendance presented by the many and varied meetings for physicians. In this connection, your council wishes to report that eleven specialty societies will be meeting concurrently with the association's 99th Annual Session. The council believes that this combination of meetings benefits all groups involved and urges the support of the House of Delegates in encouraging a fuller implementation of this concept.

Additionally, your council wishes to note that although our association continues to surpass all other state medical associations in the Gulf South area in the percentage of members attending annual sessions, we still have a great number of county medical societies who fail to register anywhere near the total percentage of members attending annual sessions. During the 1967-68 association year, your council proposes to stimulate attendance from these county societies and urges the support of the House of Delegates in this connection.

Expression of the Council. Your Council on Scientific Assembly began active organization and planning for the present annual session in July of 1966. We are deeply grateful for the support, assistance, and cooperation which we have received, and we trust that the 99th Annual Session is professionally profitable and personally enjoyable to all.

RESOLUTION NO. 2, COMMISSION ON
THE MEDICAL ASPECTS OF SPORTS, IN
BEHALF OF THE CENTRAL MEDICAL SOCIETY

WHEREAS, The physical development of our youth is a paramount part of our state's and nation's strength, and

WHEREAS, Physical fitness is accomplished in the public school system, colleges, and universities within the various states, and

WHEREAS, Competitive athletics are healthy and desirable—morally and physically—within and among the schools of all levels, and

WHEREAS, Organized medicine continually is taking part in medical and surgical aspects of sports, and

WHEREAS, Various groups of physicians are and have made important contributions in the prevention and treatment of the various medical aspects of sports, and

WHEREAS, With increasing numbers of our youth engaged in competitive athletics, the public interest can best be served by knowledgeable individuals working together to improve all sports for all participants, spectators, family, and school, now, therefore, be it

Resolved, That the Mississippi State Medical Association recommend to the Governor of the State of Mississippi that a Commission on the Medical Aspects of Sports be created within the organization of the Government of the State of Mississippi, and be it further

Resolved, That the Commission be composed of two members from the Mississippi State Medical Association, selected by the president of the Mississippi State Medical Association; two members of interested legislators, selected by the Governor; and two members of the State Department of Education Association appointed by the president of the M.E.A.

Each member of the Commission would serve a four year term to coincide with the incoming Governor. They would serve without pay. And, be it further

Resolved, That this Commission would be charged with the following responsibilities:

(1) Advise every Governor of current improvements, techniques, and concepts pertaining to the medical aspects of sports.

(2) Obtain and maintain complete records of illness attributed to participation in any of the various sports in which the schools at every level participate.

(3) Evaluate every incident that has led to death or premature disabilities.

(4) Recommend measures to the Governor which will promote a healthier athletic atmosphere within the state.

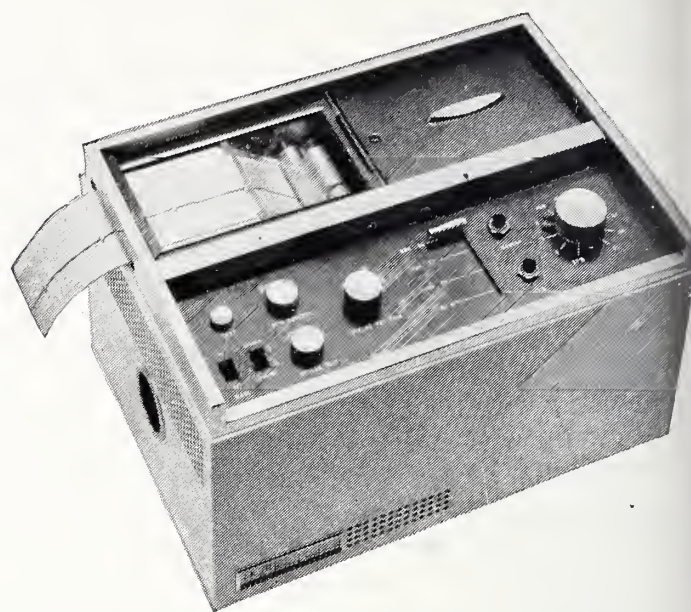
(5) Cooperate with various State Agencies in bringing forth information on athletic injuries to schools, parents, the participants, and the general public.

Index to Advertisers

In accepting advertising for publication, the JOURNAL has exercised reasonable precaution to insure that only reputable, factual advertisements are included. Nevertheless, claims made by advertisers in behalf of goods, services, and medicinal preparations, apparatus or physical appliances are understood to be those of the advertiser. Neither sanction nor endorsement of such is warranted, stated, or implied by the association.

	Page
Abbott Laboratories	18, 19, 20, insert facing 254
Ames Company	257
Appalachian Hall	10
Ayerst Laboratories	236, 237
Blue Cross	6, 7
Bristol Laboratories	27, 244, 245
Burroughs Wellcome	265
Continental Casualty Co.	24
Dorsey Laboratories	insert facing 238
First Federal of Jackson	11
Geigy Pharmaceuticals	16, 17
Glenbrook Laboratories	241
Highland Hospital	263
Hill Crest Hospital	265
Hynson, Westcott, and Dunning	3
Kay Surgical	278
Lederle Laboratories	218B, 218C, 250, 270D, 271
Eli Lilly	front cover, 10B, 10C, 10D, 26, 218F, 218G, 218H
Wm. S. Merrell	260, 261
Parke, Davis and Company	2
Philips Roxane Laboratories	268, 269
Pitman-Moore	22, 23
William P. Poythress	264
Riker Laboratories	235
A. H. Robins Company	10A, 218A
Roche Laboratories	270B, 279C, back cover
J. B. Roerig and Company	270A
William H. Rorer	21, 248, 249, 263
St. Paul Insurance Co.	247
G. D. Searle	center
Stuart Company	25
Syntex Laboratories	12, 13, 14, 15, 252 253
Winthrop Laboratories	4
Leonard Wright Sanatorium	259
Wyeth Laboratories	8, 9, 239, 274, 275
Thomas Yates & Co.	24

Burdick



Has the diagnostic equipment in your office kept pace with your own knowledge of new drugs, medicines and technics?

Write us for full details on the Burdick EK-IV Dual-Speed Electrocardiograph.

KAY SURGICAL INC.
663 North State St. • Jackson, Miss.



CLASSIFIED

Busy solo general practice available, same location for 20 years. Present physician leaving July 1 to accept position with Mississippi State Board of Health in same city, pop. 22,000. Has 400 bed hospital, 40 M.D.'s in city, five in general practice. Modern rented 11 room office. Walk-in, ready-made practice for right physician. Frank K. Tatum, M.D., Professional Bldg., Tupelo, Miss. 38801.

IDLING SPEED

"Of course, madam," said the shoe department manager. "We have an excellent selection of loafers. I'll see if I can get one to wait on you."

Volume VIII
Number 5
May 1967



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
JAMES T. THOMPSON, M.D.
President
TEMPLE AINSWORTH, M.D.
President-elect
JAMES L. ROYALS, M.D.
Secretary-Treasurer
HOWARD A. NELSON, M.D.
Speaker
WILLIAM E. LOTTERHOS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

CONTENTS

ORIGINAL PAPERS

- Treatment of
Ovarian Dysfunction
With Cortisone
or Estrogen **279** WILLIAM MCK. JEFFERIES, M.D.

SPECIAL ARTICLES

- Radiologic
Seminar LXI **284** F. J. HAMERNIK, M.D.
Cancer of the
Nasopharynx **286** S. G. MOUNGER, M.D.
Clinicopathological
Conference
LXXXVII **289** Mississippi Baptist Hospital
Coronary Heart
Disease: Part III **295** WILLIAM H. ROSENBLATT, M.D.

EDITORIALS

- Mopping Up
Measles, the
Inexcusable Tragedy **301** 500 Deaths Per Year
The Ethics of Credit
Card Financing **302** Ethical, But Tricky
Respiratory Disease
and Socioeconomic
Status **312** Study at Chapel Hill
Serving Better the
Cause of Justice **314** Forensic Pathology Forward

THIS MONTH

- Meetings **299** The 99th Is Next
The President
Speaking **300** The Last Word: Thanks
The Literature **323** New Books Reviewed
Medical Organization **331** All the News

Copyright 1967, Mississippi State Medical Association

Insurance Hassle Set for Atlantic City

A hotly debated intramural hassle of almost unprecedented proportion is sure to rock the AMA annual convention at Atlantic City, June 18-22, when the House of Delegates gets the association's hot potato disability insurance program. The decision to check the controversy to the House was made by the Board of Trustees.

At loggerheads are the AMA trustees and the insurance claims review committee headed by Dr. James Z. Appel of Lancaster, Pa., immediate past president, and the colorful insurance broker-major league baseball team owner, Charles O. Finley of Chicago. Finley is administrator of the soon-to-expire program which has enrolled about 40,000 AMA members.

The controversy began to flare in 1965 when the carrier, the Continental Casualty Co. of Chicago announced that the program would not be renewed in 1967 unless the premium or benefit structure or both were drastically altered. The AMA Board of Trustees and their actuary consultants say that the present program is unsound. Finley says it is not.

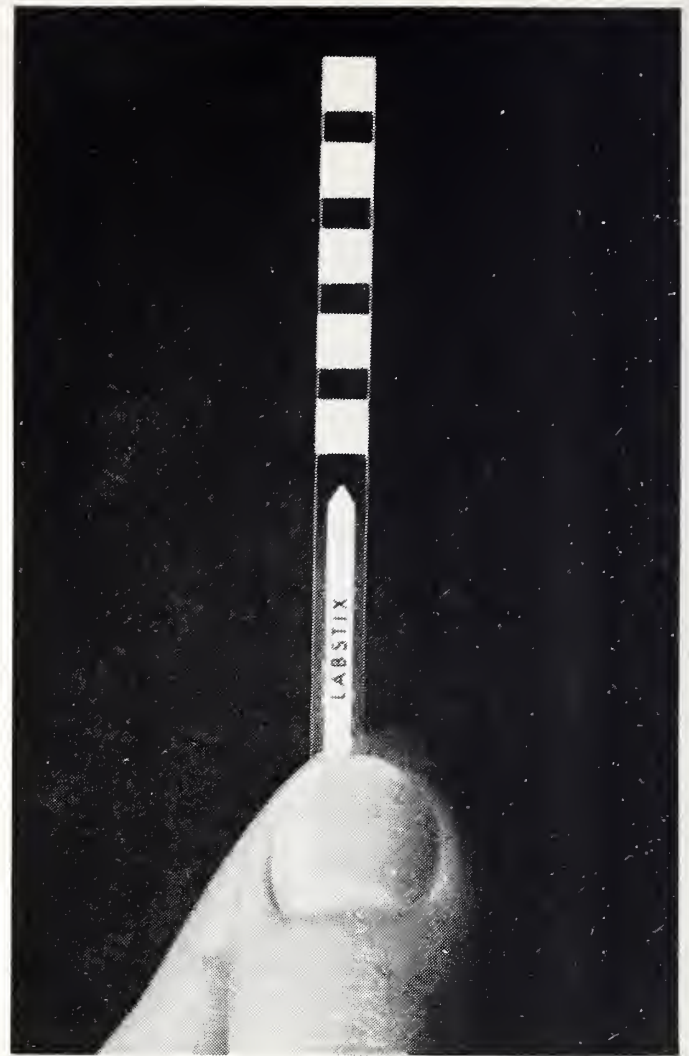
Offering a counterproposal to the AMA Board at Las Vegas during the 1966 clinical convention, Finley proposed continuation of the program by the Fireman's Fund Insurance Co. at the same premium and benefit structure. The trustees rejected the offer as pressure to negotiate on the spot, since Finley had proposed an expiration of the offer within the week.

Subsequently, the AMA Board made the decision to modify the existing program, improve claims service, and seek another administrator. Over the past two months, intensive letter-writing campaigns have been conducted both by Finley and AMA. Chief spokesmen for AMA have been Dr. Wesley W. Hall of Reno, Nev., chairman of the Board of Trustees, and Dr. Appel.

Dr. Appel has charged that Finley's communications to AMA members and state medical associations "may have the effect of confusing and misleading physicians."

He said that "I can readily understand the administrator's hard sell tactics in trying to retain the AMA program." Appel declared that "the program provided his firm with more than \$700,000 per year in commissions." He said that Finley is attempting to generate pressure upon the Board by appealing directly to insured members of the AMA.

Finley has refuted the Board and committee contentions on a point-by-point basis in volumi-



Take five...

LABSTIX® provides 5 important urinary findings*—on a single reagent strip! That's *more* information than you can get from any other single reagent strip. You know the results in just 30 seconds—while the patient is still in your office—and readings are reliable and reproducible. LABSTIX is easy to handle, too. Never goes limp, even when wet, because it's made with clear, firm plastic. And results with LABSTIX are easy to read—color contrast between the test areas and the transparent plastic is clearly defined. An unexpected "positive" from testing with LABSTIX may help in detecting hidden pathology before marked symptoms are manifest.

*Blood; ketones; glucose; protein, and pH.

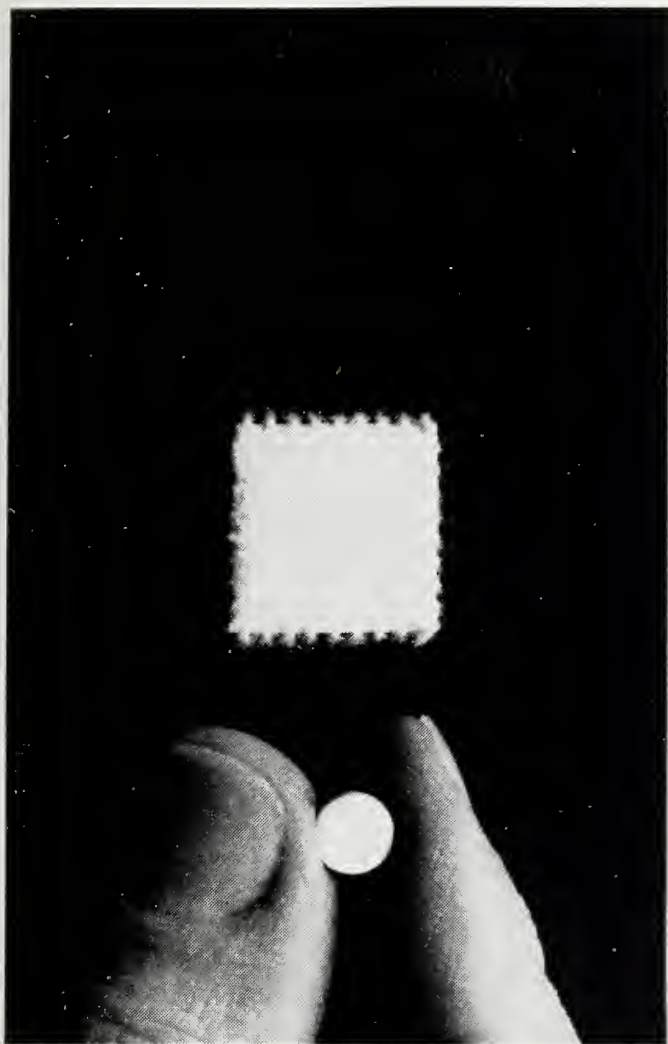
AMES COMPANY
Division Miles Laboratories, Inc.
Elkhart, Indiana 46514



Ames

Note: AMERICAN HOSPITAL FORMULARY SERVICE
CATEGORY NUMBER 36:88

40167



...Plus one

You can extend your testing scope by including ICTOTEST® Reagent Tablets, the 30-second determination for bilirubinuria—which can be an early sign of obstruction of the common bile duct, infectious hepatitis, or other liver disease. This test is also useful for detecting liver damage from carbon tetrachloride and other halogenated hydrocarbons used as industrial and household solvents. Positive findings with the urine-testing team of LABSTIX and ICTOTEST can represent significant guides to patient management in many clinical situations. “Negatives” may help rule out suspected abnormalities over a broad clinical range and are important for the patient’s record.

AMES COMPANY
Division Miles Laboratories, Inc.
Elkhart, Indiana 46514



Note: AMERICAN HOSPITAL FORMULARY SERVICE
CATEGORY NUMBER 36:88 40167

nous correspondence. He has offered to continue the same program at the same premium rate with the Fireman’s Fund as carrier.

AMA delegates report high interest among members and a heavy volume of correspondence and telephone calls.

Quipping about the high interest level among physicians on the issue, one Mississippi medical leader told the JOURNAL that “the best way we could have beat Medicare would have been to issue every member an insurance policy against it and then told them we were going to change the policy.”

The AMA trustees, in a two day meeting, decided to give the matter to the House of Delegates. A special reference committee will hear the controversy on June 19 at 2:00 p.m., according to AMA sources.

The program was initially adopted at the 1961 New York annual convention and became effective in 1962.

AAP Devises Home Vision Test

A simple hand card test may soon enable parents visually to screen preschool children in their own homes to determine early cases of amblyopia ex anopsia.

The card, called the modified Sjogren hand card, has been developed by the Illinois Chapter of the American Academy of Pediatrics, the Illinois Department of Public Health, and the Chicago Medical Society. It is intended for testing three, four and five-year-old children.

The 5½ × 5½ inch card, showing a small picture of a hand, is held by the parent in six distinct positions in differing sequences to insure effective results.

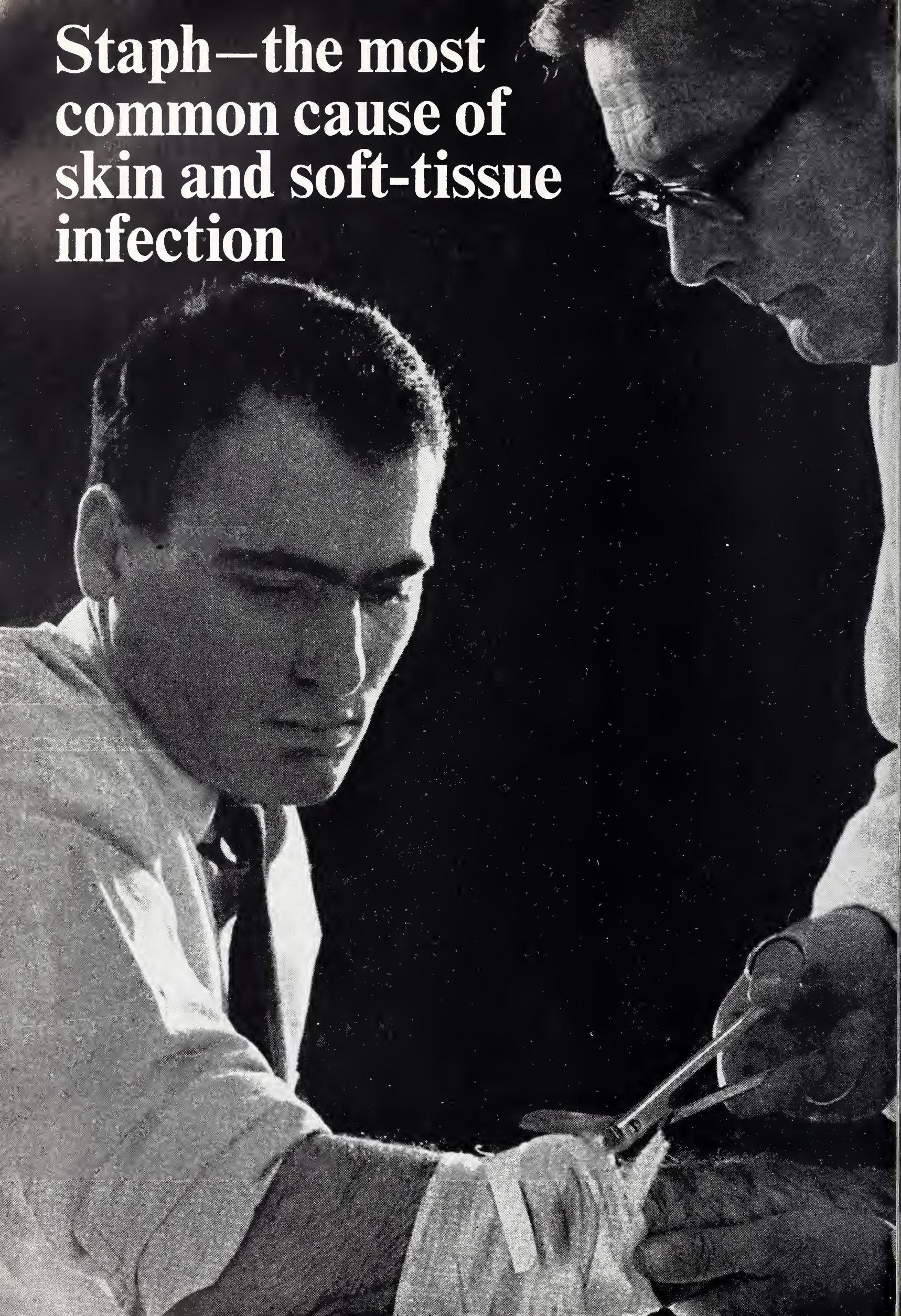
The child is asked to point his hand in the same direction as the hand pictured on the card at a distance of three feet, and again at twelve feet, using both eyes, the right eye only, and finally only the left eye.

If a child cannot identify the correct direction in at least four of six positions, he may have an early case of amblyopia ex anopsia. An ophthalmological examination would then be recommended.

Scores are recorded on a special post card and mailed to the physician.

As reported in a recent AAP *Newsletter*, a pilot study conducted by 32 pediatricians to determine the card’s effectiveness, indicated that six physicians found one or more early cases of amblyopia ex anopsia among their three and four-year-old patients.

Staph—the most common cause of skin and soft-tissue infection



reliably controlled with specific therapy



Available dosage form for every staph situation

ph—the most common cause of skin and soft-tissue infection—also is responsible for many more serious infections, such as pneumonia, osteomyelitis, and bacteremia. Often, a seemingly minor skin infection is the source of metastatic spread to deeper structures. When findings on culture incriminate staph as the cause, Prostaphlin (sodium oxacillin) will provide specific effective therapy.

Bactericidal effectiveness. Hardly a staph organism can resist the bactericidal action of Prostaphlin (sodium oxacillin), as shown by a 34-month *in vitro* study. Of all staph isolates tested, 99.5% were sensitive to oxacillin.¹

Clinically proven. There is a high correlation between these *in vitro* findings and clinical results. Of 610 patients treated with Prostaphlin (sodium oxacillin), 89.8% were reported cured or improved, including those with staph infections resistant to penicillin G.² And since resistance does not appear to develop *in vivo*, therapy with oxacillin can be extended when necessary.

Outstanding safety record. Besides being staph-specific and rapidly absorbed—Prostaphlin (sodium oxacillin) has established an outstanding record of safety during five years of widespread clinical use. Continuous high blood levels of oxacillin have not produced toxic effects on kidney function, assuring a significant margin of safety. However, as with all penicillins, the possibility of allergic response should be considered.

Capsules, Oral Solution and Injectable. Prostaphlin (sodium oxacillin) is available in three flexible dosage forms to suit the age of the patient and severity of infection—capsules, an oral solution for pediatric use, and multi-dose vials for injection, I.M. or I.V.

PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY: 8:12.6

References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N.Y. 2. Data on file, Bristol Laboratories.

BRISTOL

BRISTOL LABORATORIES/Division of Bristol-Myers Co., Syracuse, N.Y.

Whenever you
suspect staph
PROSTAPHLIN®
SODIUM OXACILLIN

Rural Clinic Loan Program Is Urged

Sen. Joseph D. Tydings (D, Md.), has introduced a bill to establish a \$10 million loan program for the development of some 200 rural community medical clinics across the nation.

He explained that many communities are now unable to recruit replacements for physicians lost through death, retirement or inadequate working conditions, because they do not have the medical facilities to support modern medical practices.

"Doctors are now taught medicine which must have the support of modern technology—laboratories, x-ray and electrocardiology equipment, for instance. Physicians are unwilling to practice medicine where they have no hope of finding this kind of technological equipment. My legislation will provide the kind of incentives which will encourage physicians to serve in these areas of vital need," the senator stated.

"In Maryland, some areas of Dorchester, Wicomico and Garrett counties are more than 20 miles from a physician and there are no physicians now serving the area between Cumberland and Hancock," Tydings noted.

Nationally, 100 counties, with a total population of 297,000, have no doctor, the American Medical Association reports. Another 150 counties, with a total population of 753,000, are served by one physician each, according to the same source.

Drug Giants Settle Tetracycline Suit

Chas. Pfizer & Co., Inc. and McKesson & Robbins, Inc., have jointly announced that they have settled all litigation between them relating to tetracycline.

Pfizer has agreed to dismiss its suit against McKesson, which is pending in the Federal District Court in Connecticut, alleging infringement of its patent on tetracycline. McKesson has agreed to dismiss its suit against Pfizer, pending in the Federal District Court in Philadelphia, alleging violations of the Federal antitrust laws by Pfizer and seeking a declaratory judgment that the Pfizer patent is invalid.

Under the terms of the settlement agreement, McKesson will purchase some of its requirements of bulk tetracycline from Pfizer.



Blessed event?

Not entirely, when nausea and vomiting occur in early pregnancy. Emetrol offers prompt and safe relief. Local rather than systemic

action provides emesis control on contact with the hyperactive G.I. tract.* In a study of 123 pregnant women, the drug produced measurable improvement in 79% of patients in controlling vomiting.¹

*As shown by *in vitro* studies.

1. Crunden, A. B., Jr., and Davis, W. A.: Am. J. Obst. & Gynec. 65:311 (Feb.) 1953.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol®
phosphorated carbohydrate
solution
emesis control

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

May 1967

Dear Doctor:

The May issue of Good Housekeeping may be the last one read by some physicians, despite the magazine's record for good medical information. The new issue carries a "fair and impartial" article on chiropractic, giving "both sides" of the issue.

Biggest contradiction in the whole affair isn't the article but the editor of this popular homemaking magazine. At the 1963 AMA Congress on Medical Quackery, GH Editor Wade H. Nichols appeared as an expert against quacks, representing publishing industry.

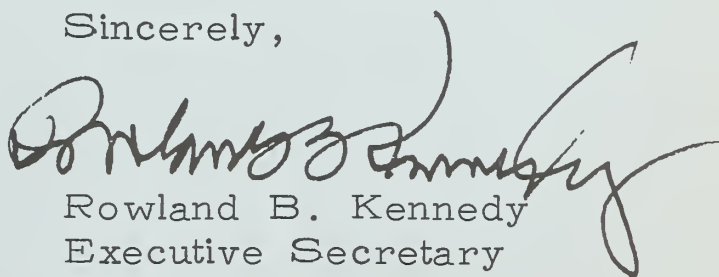
The famed cancer research center, Roswell Park Memorial Institute of New York, has released studies on cigarette tar and nicotine content. RPMI rated the 56 biggest selling brands, finding the lowest rated fag, Raleigh, had eight times more nicotine and five times more tar than the highest, Marvel. Some pack-a-day smokers are getting 800 mg of tar daily.

Title XIX, care for the needy, is being rapidly implemented by the states, as legislatures act. Latest boost is support of program by the giant Texas Medical Association which wrote and sponsored the Title XIX bill in the Lone Star state legislature. Estimates are that 48 state programs will be working by January 1, 1970, deadline.

It made no headlines, but a potentially explosive showdown on federally aided church-supported medical institutions is in the offing. The Senate passed S.3 which would permit a court test of the constitutionality of Hill-Burton, federal aid to medical education, and the Mental Retardation Facilities and Community Mental Health Center programs as regards grants to church-related schools and hospitals.

After Biloxi and the 99th Annual Session, it's on to Atlantic City and the AMA June 18-22. The Jersey coast convention mecca is looking for better days and is attempting to secure federal money under urban renewal to build a new \$10 auditorium.

Sincerely,



Rowland B. Kennedy
Executive Secretary



Sen. Long Sponsors Omnibus Drug Bill

Washington - Sen. Russell Long (D., La.) has introduced S.1303 as a successor to his so-called "compulsory generic prescribing" bill of last year. New measure, "Quality and Cost Control Standards for Drugs Act," would cut a swath across Social Security, FDA, and other laws. Net effect of complex bill is to set both standards and price which would be met in federal medical programs. Also included would be a new Title XX to Social Security affecting both Titles XVIII (Medicare) and XIX (care for the needy) on drugs.

Medical Schools Construction Booms In U.S.

Evanston, Ill. - The Association of American Medical Colleges reports that U.S. medical schools have spent over \$2 billion since 1948 on construction and are still short by another \$1.8 billion in needed buildings. Expenditures show 55 per cent went for medical service facilities, 40 per cent was spent for teaching and research buildings, and 5 per cent for other purposes. Since 1960, U.S. schools have averaged \$70 million annually in building programs.

Michigan Legislature Is Leaning On Smoking

Lansing - Three bills before the Michigan legislature would clamp down on cigarette smoking and may reflect the teetotaling habits of Governor Romney. One bill would ban cigarette vending machines from all state buildings, including all schools and colleges. A second would fix a legal age for smoking at 18 years old. Third proposal would make health organizations, educational groups, and public health authorities all voting members of new state commission to enforce laws.

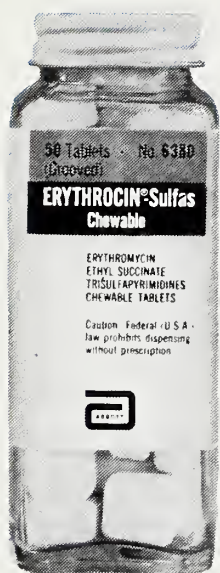
Political Rights Of Hospital Employee Are Upheld

Sacramento, Calif. - The California Supreme Court held that a public hospital could not prevent its employees from participating in political campaigns during off-duty hours. A nurses aide was discharged for such activity, but the court held that while an individual does not have a constitutional right to public employment, this doesn't mean that they may be deprived of such rights as a precondition to this employment. Citation is Bagley v. Washington Township Hospital, 55 Cal. Rep. 401 (Cal. Dec. 20, 1966).

Fire, Explosion Mortality Continues High

New York - Biostatisticians of the Metropolitan Life Insurance Co. report the mortality rate for fires and explosions up over the 1959-63 four year average to 4.3 per 100,000 from 4.0. About 7,000 Americans meet these violent deaths annually with highest rates for those over 65 years old.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN®-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%

¹ Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
² Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



Brief
Summary
on next
page

ERYTHROCIN[®]-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



Rocky Mountain Cancer Meet Is Set at Denver

Denver, Colorado, is once again the site of the Rocky Mountain Cancer Conference, July 14-15, at the Brown Palace-West Hotel. The 21st Annual Rocky Mountain Cancer Conference will feature some of the nation's most noted speakers on the subject of cancer during the two days it will be in session.

Morning symposia will deal with "What's New in Cancer" and "Cancer of the Biliary System and Its Related Structures." The afternoon session of the first day will be devoted to scientific papers by guest speakers with the second afternoon devoted to an "Information Please" session.

Dr. Milford O. Rouse, now president-elect of the American Medical Association, and Dr. Ashbel C. Williams, president of the American Cancer Society will participate in the conference which is held annually in Denver and co-sponsored by the Colorado Division of the American Cancer Society and the Colorado Medical Society.

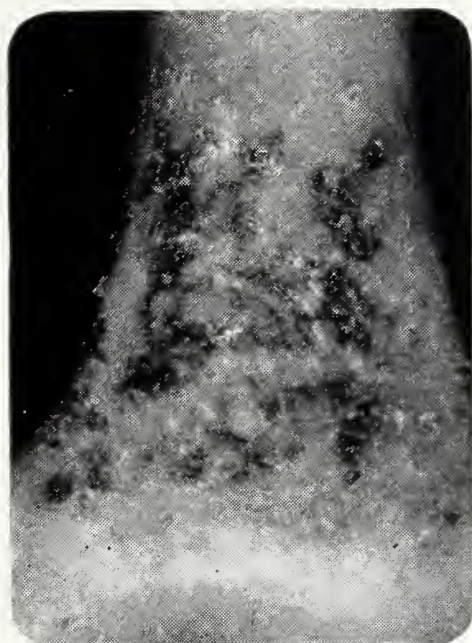
Pigeon Allergy Will Be Investigated

Allergic reactions to pigeons will be investigated by Marquette University scientists this year. Such reactions are one of a number of hypersensitivity states being studied with the support of the National Institute of Allergy and Infectious Diseases.

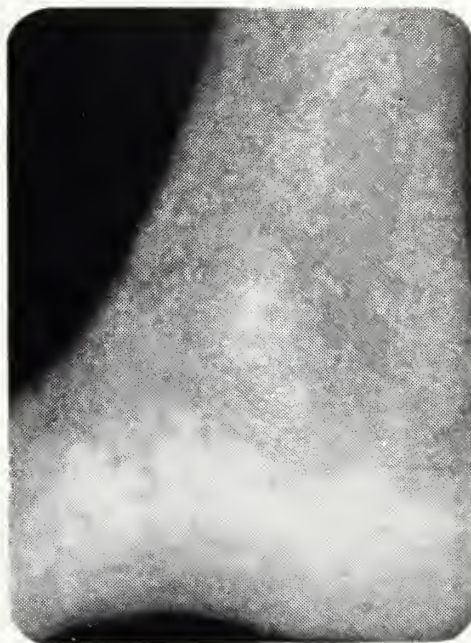
Dr. William H. Stewart, Surgeon General of the Public Health Service, today announced the new grant, awarded to Dr. Joseph J. Barboriak, assistant professor of pharmacology at the university in Milwaukee, Wis. Studies of the body's responses to foreign substances are a significant part of the Institute's overall research program in the field of hypersensitivity, which will aid some 55 grantees at non-federal medical centers and universities during the current fiscal year with a total of \$1,660,000.

Dr. Barboriak and his team of investigators will pursue their recent observations of a hypersensitivity reaction that develops in persons exposed to pigeons. A form of pneumonitis, fever, and chills are symptoms of the disorder which are similar to those seen in such disabling occupational conditions as farmer's lung and maple-bark stripper's disease. The latter ailments are suspected of being related to contact with certain molds, the disease-producing parts of which are difficult to isolate.

Eczema of many years... controlled in two weeks



Before treatment



After treatment —
with ARISTOCORT Topical
Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side

effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive non-permeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyodermas will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

PHOTOGRAPHS COURTESY OF M. M. NIERMAN, M.D.

Aristocort®

Topical Ointment 0.1% and Cream 0.1%, 0.5%
Triamcinolone Acetonide

Also available in foam form.



LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

406-G

PHS Funds Anti-Pollution Program

More than \$100,000 in grants to help train graduate engineers and scientists to fill technical manpower gaps in the national campaign against solid waste pollution was announced today by the Solid Wastes Program of the Public Health Service's National Center for Urban and Industrial Health.

The grants were to the University of Florida at Gainesville, \$37,632 and the University of West Virginia at Morgantown, \$68,358. About one-third of each grant is earmarked for support of students, including stipends, tuition and fees, and travel expenses.

Award of the grants brought to six the number of institutions of higher education conducting solid waste management training at graduate levels with help from the Solid Wastes Program. The grants support instruction to prepare students for key assignments in local, State, and Federal efforts to introduce advanced waste disposal technology to replace practices now widely threatening human health and causing scenic blight.

"Progress in controlling pollution from solid wastes is being seriously impeded by a critical shortage of personnel trained in modern waste management techniques," said Leo Weaver, Chief of the Solid Wastes Program. "The solid wastes problem already is one of the most serious environmental health hazards in the Nation and will become a full-blown crisis unless we soon have young engineers and scientists trained in the development and effective utilization of disposal technology worthy of a country as advanced as ours."

The grant to the University of Florida is for addition of a new curriculum within a recently established Department of Bioenvironmental Engineering.

The West Virginia University grant will be used to expand a solid waste training program which had been conducted in conjunction with research partially supported by the Public Health Service since 1962. The expansion covers training and research on engineering and economic aspects of municipal refuse handling, land reclamation, and related problems.

Training grants totalling more than \$150,000 previously have been made to the Drexel Institute of Technology, Philadelphia, Pennsylvania; the Georgia Institute of Technology, Atlanta; the University of Michigan, Ann Arbor; and the University of Texas, Austin.

Tandearil[®] oxyphenbutazone

Tandearil in Painful Shoulder

Therapeutic Effects: Stiffness and pain may diminish within 2 days, and full mobility may be restored within a week. These effects are obtained with oxyphenbutazone alone or combined with physiotherapy or local hormonal injections. The drug is usually well tolerated and does not affect pituitary-adrenal function or immune response.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Painful Shoulder: 600 mg. daily in divided doses for 2 to 3 days; 300 mg. daily thereafter. Usual duration of therapy: 2 to 7 days.

Availability: Tablets of 100 mg.

6562-VI(B)R

For complete details, please refer to full prescribing information.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsey, New York

Mead Johnson Recalls Unsterile Product

Mead Johnson Laboratories has announced the recall of all eight ounce Enfamil Nursette™. The president of the organization, D. Mead Johnson, said that the recall was in response to FDA findings that samples from four batches were not sterile.

"We wish to emphasize that the four and six ounce sizes of Nursette are not affected by this recall," Johnson said. "No other liquid or powder forms of Enfamil™ are involved in this action," he added.

The announcement said that the recall of all current stocks of the eight ounce Nursette has been made known to physicians, drug wholesalers, retail pharmacists, food brokers, hospitals, and others who might sell or recommend the product.

Pediatrician Finds Dangers in Safety Caps

In a study of children between 20 and 40 months of age, Dr. Alan K. Done reported that conventional screw caps or the new safety closures on bottles "proved to be easily opened" while tablets individually packaged in "strip pack reduced the number of tablets ingested."

Dr. Done, who is associate professor of pediatrics at the University of Utah Medical Center, announced his findings in a scientific exhibit at the meeting of the American Academy of Pediatrics in San Francisco.

Under the title "A Realistic Approach to the Prevention of Childhood Poisoning," Dr. Done indicates that prevention of childhood poisonings requires more than an educational campaign to keep medicines out of children's reach. In 60 per cent of accidental poisoning cases, the bottle or box was not in its usual storage place when the children found it. Also limiting the number of doses per package will help only with children's aspirin but not with adult aspirin, because so few of the latter tablets can produce poisoning.

Dr. Done indicates that over 25 per cent of accidental poisonings among children are caused by aspirin. His exhibit reviews 500 cases of children under five, and indicates that the more serious cases are caused by adult aspirin.

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

*The
fast-disintegrating
uncoated tablet
gives relief in
15 minutes*

Each tablet contains:

Potassium Iodide 195 mg.
Aminophylline 130 mg.
Phenobarbital, Caution: May be habit forming . . . 21 mg.
Ephedrine HCl 16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of
water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

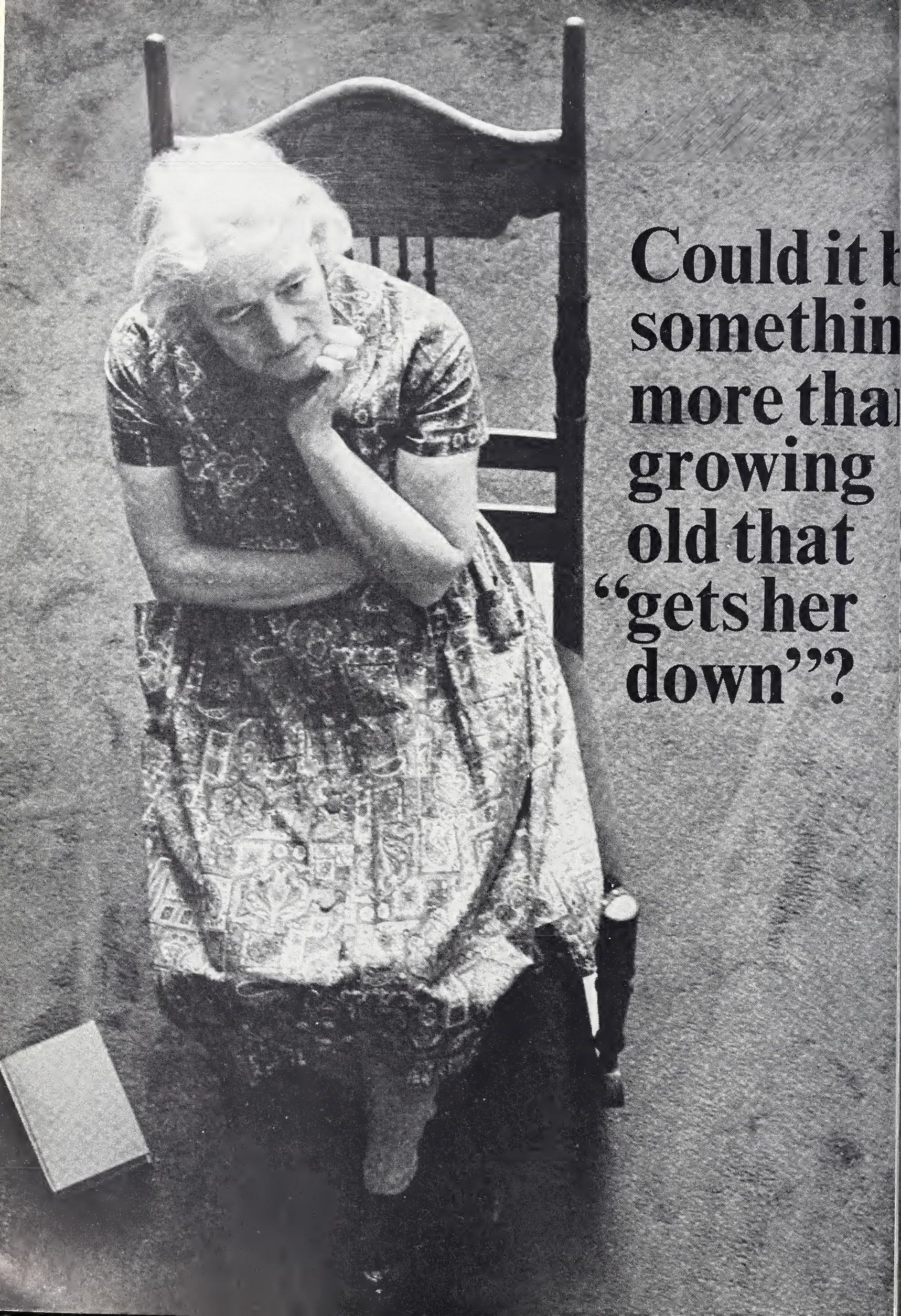
MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856





**Could it be
something
more than
growing
old that
“gets her
down”?**

ild mood depression,
or appetite, little
erest in the present or
ture. Does this picture
ean that she's giving in
functional fatigue?
When functional fa-
gue is part of her prob-
m, Alertonic can help
interact accompanying
athy and inertia. It
elps lift mood, stimulate
ppetite, and establish
ew interest in daily life.

Pleasant-tasting Alertonic combines pipradrol hydrochloride—a gentle cerebral stimulant—with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Available only on prescription
Alertonic®

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%, pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

SKF Executive Is New PMA Chairman

Walter A. Munns, chairman of the board of Smith Kline & French Laboratories in Philadelphia, Pa., has been elected to a one-year term as chairman of the board of the Pharmaceutical Manufacturers Association, succeeding Lyman C. Duncan, vice president for medical affairs of the American Cyanamid Company, Pearl River, New York.

Munns was elected at the conclusion of the Washington-based association's ninth annual meeting recently at Boca Raton, Fla.

PMA is a scientific, professional and trade organization representing 140 manufacturing firms which produce more than 90 per cent of the nation's prescription drug products.

Munns has been associated with the prescription drug industry for 37 years, beginning his career with Smith Kline & French as a member of the medical promotion staff. In 1945, he became vice president in charge of medical promotion and five years later was elected to the firm's board of directors. He subsequently served as Smith Kline & French's executive vice president,

president, and last year was elected chairman of the board.

C. Joseph Stetler, full-time president of PMA, announced that E. Claiborne Robins, president of A. H. Robins Company, Inc., of Richmond, Va., is PMA's new chairman-elect. Robins, a registered pharmacist who attended the University of Richmond and the Medical College of Virginia, has been actively associated in the management of the Robins firm since 1933, becoming president in 1936. He is a member of both Phi Beta Kappa and Omicron Delta Kappa.

Lederle Cuts Antibiotic Prices

The ninth major price reduction for its broad spectrum antibiotics has been announced by Lederle Laboratories, a Division of American Cyanamid Company.

The decreases amount to 25 per cent on the principal forms of Achromycin V tetracycline and 10 per cent on principal forms of Declomycin demethylchlortetracycline.

The most recent previous price reduction was made by Lederle in April of 1966.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761



ORIGINAL PAPERS

Treatment of Ovarian Dysfunction With Cortisone or Estrogen

WILLIAM McK. JEFFERIES, M.D.

Cleveland, Ohio

IN RECENT YEARS the publicity received by the contraceptive pills and by the ovulatory stimulators clomiphene and the gonadotropins has tended to overshadow other methods of therapy for ovarian dysfunction. There is no doubt that these agents may be helpful in some cases, but in most instances equally good or better results can be obtained by the administration of much smaller, more physiologic doses of hormones that have been available for many years. The demonstration of new and more effective applications of these older preparations has not received as much attention as the introduction of the newer products, and many physicians are not aware of their therapeutic potentialities in this field.

An attempt will therefore be made to restore perspective in this area by reviewing the rationale and effectiveness of the various medical therapies of ovarian dysfunction, with special emphasis on two that have received relatively little publicity in spite of their being the most logical, most helpful, and safest methods currently available.

Disorders of ovarian function may be classified symptomatically (Table 1) as (1) amenorrhea, (2) irregular menses, (3) metropathia hemorrhagica, or functional uterine bleeding, and (4)

luteal phase disorders. In our clinic, amenorrhea is defined as absence of spontaneous menses for at least a year. If a patient has never had a spontaneous flow, this is termed primary amenorrhea.

In recent years many developments have occurred in the field of ovarian dysfunction. The author notes that additional study and experience are needed to determine the proper place for each therapeutic agent and recommends that, in the meantime, physicians should not overlook the use of small doses of cortisone or estrogen. They attempt to "restore perspective" by reviewing the rationale and effectiveness of the various medical therapies of ovarian dysfunction, with special emphasis on these two agents they have received relatively little publicity.

If the cessation of menses occurs after the onset of spontaneous bleeding, either regular or irregular in nature, it is termed secondary amenorrhea. Irregularity of menses is the commonest type of ovarian dysfunction encountered clinically. It may occur with complete absence of ovulation or with irregular ovulations. Functional uterine bleeding is associated with lack of ovulation and persistent estrogen effect manifested by a thick, spongy, proliferative endometrium and relatively

From the Infertility Clinic, Maternal Health Association of Cleveland, and the Department of Medicine, Western Reserve University School of Medicine.

Read before the Section on Obstetrics and Gynecology, 98th Annual Session, Mississippi State Medical Association, Jackson, May 9-12, 1966.

high cornification counts on spreads of vaginal secretions. Luteal phase disorders may be manifested by abnormal duration, either short or long, subnormal basal temperature rises, or abnormal secretory endometrium by biopsy. These may occur with relatively regular cycles or with irregular cycles.

Ovarian dysfunction may also be classified etiologically according to the glands whose abnormal function causes it. Such a classification includes disorders of the pituitary, the ovaries, or the adrenals. With severe abnormalities of pituitary function, such as acromegaly or panhypopituitarism, ovarian dysfunction is overshadowed by other clinical manifestations, and treatment is directed primarily towards correcting the pituitary disorder. Estrogen replacement may be indicated in some cases. Similarly, severe abnormalities of ovarian function, such as Turner's syndrome, are treated with estrogen replacement, and severe abnormalities of adrenocortical function, such as Cushing's syndrome or the adrenogenital syndrome, are treated with measures directed towards correcting the adrenal disorder. Recently it has been recognized that more subtle abnormalities of ovarian or adrenocortical function may result in abnormalities of menses and interference with ovulation, and that the majority of cases of ovarian dysfunction encountered clinically fall into this category.

SUBTLE ABNORMALITIES

These milder abnormalities appear to be secondary to relative or absolute deficiencies of enzymes in the pathways of production of ovarian or adrenal steroids. The close inter-relationship of the functions of these two sets of glands is not surprising when it is realized that enzymatic steps from pregnenolone→progesterone→17-hydroxyprogesterone→androstenedione→estrone or estradiol and from pregnenolone→17-hydroxy-pregnenolone→dehydroepiandrosterone→androstenedione→estrone or estradiol are common to both ovaries and adrenals.¹ With evidence that the adrenals even of normal women may produce estrogen,² excessive adrenal production of estrogen appears to be a probable explanation of many cases of ovarian dysfunction observed clinically.

Two diagnoses that have probably been overemphasized are the Stein-Leventhal syndrome and hypothalamic amenorrhea. The former is a relatively infrequently encountered clinical disorder resulting from defective biochemistry of the ovaries or of both ovaries and adrenals and manifested

by irregular menses or amenorrhea. By definition, it includes only those patients with bilaterally enlarged, polycystic ovaries, and it appears to be a rather small subgroup of the disorders caused by abnormal steroid metabolism. It achieved recognition mainly because of its response to wedge resection of the ovaries, but it appears that medical therapy with steroids may be equally effective. The term "hypothalamic amenorrhea" has been applied to secondary amenorrhea precipitated by nervous tension or emotional stress. The relationship to a disorder of the hypothalamus is purely hypothetical, and the fact that it often responds nicely to low dosage glucocorticoid therapy suggests that it results from a mild disorder of adrenocortical function that is aggravated by stress.

EMPIRIC MEDICATION

A number of medications have been recommended for treatment of ovarian dysfunction, some on a relatively empiric basis. Thyroid, in the form of desiccated thyroid, sodium-1-thyroxine, or triiodothyronine, has often been suggested as therapy for all types of ovarian dysfunction, but in our experience it has seldom benefitted except in the presence of a non-toxic thyroid enlargement or other evidence of abnormality of thyroid function.³ Studies have indicated that thyroid hormone level may affect steroid metabolism, so this may underlie the relationship between disorders of the thyroid and the ovaries.

The cyclic administration of progesterone or other agents with progestational effects has occasionally been helpful, especially in women with anovulatory functional uterine bleeding. The beneficial effect results from the promotion of a more adequate shedding of the endometrium and also probably from inhibition of the excessive production of estrogen that accompanies this disorder. Progesterone may stimulate ovulation in experimental animals,^{4, 5} so this may be another mechanism by which this steroid benefits some patients.

MENSES RESTORATION

Cyclic administration of full replacement doses of estrogen (1.25-2.5 mg. estrone sulfate daily) in some patients with amenorrhea or infrequent catamenia has also resulted in temporary restoration of spontaneous menses after three to six months of therapy. In some way the inhibition of ovarian function for several months seems to enable a restoration of normal cyclic activity after the exogenous steroid is discontinued, but the improvement usually is temporary, lasting for only a few months.

The combination of relatively large doses of estrogens and various progestational agents in the contraceptive "pills" has supplied a ready means of combining cyclic estrogen and progestational therapy, but there is no evidence that these combinations have any advantage over the administration of estrogen or progestins alone, and in some cases the contraceptive agents may aggravate rather than help ovarian dysfunction.⁶

In the last few years the stimulation of ovulation by human pituitary or postmenopausal gonadotropin or by clomiphene has received much publicity, but these agents are not available for general clinical use, and evidence that they will correct disorders that have not responded to other hormonal therapy is scant. They act through artificial stimulation of ovulation, and hence might improve fertility, but they do not correct the underlying causes of the ovarian dysfunction and hence will not produce lasting benefits in this respect. Gemzell recommends the use of human pituitary gonadotropins only in infertile women, and preferably in those with primary or secondary amenorrhea, atrophic endometrium, and low excretion of gonadotropins.⁷ In 18 such patients treated by him, 13 had one or more live infants, and in 16 women with oligomenorrhea, proliferative endometrium, and low to normal excretion of gonadotropins, only five conceived. Seven of the pregnancies were multiple. Expressed in terms of courses of treatment, with 66 courses 47 ovulations occurred (71 per cent), 16 women became pregnant (24 per cent), and 2 aborted. Comparable figures for human menopausal gonadotropin and for clomiphene are not available, although Greenblatt⁸ has reported that 190 of 257 women (74 per cent) treated with clomiphene ovulated and that ovulations occurred in 935 of 1331 courses of treatment (70 per cent). All three of these agents may cause multiple births or cystic enlargement of the ovaries. It is apparent that much additional study is necessary to clarify the indications for and hazards of their use.

CORTISONE AND ESTROGEN

At present, the most promising rational therapy of ovarian dysfunction is the use of small doses of cortisone or of estrogen. These appear to be effective through partly or completely restoring normal hormone production of the adrenals or ovaries of patients with mild enzymatic defects in the pathways of production of adrenal or ovarian hormones, respectively. Some patients' adrenals produce an excess of androgen or estrogen or both in the process of producing a normal amount

of hydrocortisone, and small doses of cortisone will restore the excess of androgen or estrogen to normal without changing the normal effective level of glucocorticoid. Some patients' ovaries have defects in the pathways of production of estrogen, resulting in an increase in FSH and excessive production of androgenic precursors with normal or low estrogen production. Small doses of estrogen will restore these levels to normal.

17-KS DIFFERENTIATION

Disorders of this nature in either the adrenals or ovaries may produce any symptomatic type of ovarian dysfunction, hence it is not possible in the average patient to determine by clinical signs or symptoms which glands are at fault. Urinary 17-KS levels are also not usually helpful in this regard, because they may be low, high, or normal in either case. An abnormal response of 17-KS to stimulation with ACTH or FSH is more specific, but such tests are not generally available. The best current means of differentiating between the two groups is therefore the response of 17-KS excretion to the administration of cortisone or estrogen. If significant decreases in urinary 17-KS excretion occur with low doses of cortisone, an adrenal disorder is indicated; and if significant decreases occur with low doses of estrogen, an ovarian disorder is likely. In some cases a combination of the two may occur, requiring both glucocorticoid and estrogen therapy for optimum results.

The more widespread use of low doses of cortisone has been impeded by the reluctance of physicians to administer a type of medication that has achieved a reputation of being a dangerous therapeutic agent. Fortunately, this reputation is only partly correct. Glucocorticoids may produce undesirable and even hazardous side effects when administered in large doses, but cortisone acetate or hydrocortisone in doses of 5 mg. four times daily or less are remarkably safe. In 773 patient-years of treatment with these doses in our clinic, not a single incidence of hypercortisonism or impairment of resistance to stress has been encountered. It should be emphasized that this experience applies to the use of the natural steroids, cortisone and hydrocortisone, in divided doses. At these dosages there has been no need to employ the newer derivatives such as Prednisone, Prednisolone, triamcinolone, or dexamethasone, which were developed in an attempt to reduce the undesirable side effects of the natural hormones. The relative safety or effectiveness of these derivatives in comparable low doses (e.g. 1 mg.

Prednisone four times daily) therefore remains to be determined.

Because adrenal disorders may cause any clinical manifestation of ovarian dysfunction, low dosage glucocorticoid therapy has been tried in patients with amenorrhea, irregular menses, metrorrhagia, and luteal phase disorders provided no other obvious cause of ovarian dysfunction was present. In a series of 104 such patients, 82 per cent experienced improvement in ovarian function, regardless of its clinical manifestations, and of the 78 women with associated infertility problems, 62 per cent had normal, live babies.⁹

TABLE 1
 CLASSIFICATIONS OF OVARIAN DYSFUNCTION

<i>Symptomatic</i>	<i>Etiologic</i>
1. Amenorrhea	1. Pituitary
a. Primary	2. Ovary
b. Secondary	3. Adrenal
2. Irregular menses	
3. Functional uterine bleeding	
4. Luteal phase disorders	

The doses of cortisone acetate or hydrocortisone employed are between 2.5 mg. every eight hours and 5 mg. four times daily, optimum dosage varying in different patients, as might be expected in the administration of normal hormone in physiologic doses. We have found that best results usually occur when patients' 24 hour urinary 17-KS excretion is maintained between 7-10 mg. In cases with pre-treatment 17-KS excretions of 15 mg. or more, an initial dosage of 5 mg. four times daily is tried; with pre-treatment excretions of 12-15 mg., 5 mg. every eight hours is started; and with excretions of less than 12 mg., 2.5 mg. four times daily is the usual starting schedule. The spreading of doses through the 24 hour period with maximum intervals of eight hours is more effective in reducing abnormal levels of 17-KS excretion than administration of only one or two doses daily.

IMPROVEMENT RATE

In some patients improvement may occur within a few weeks; in others, especially those with low estrogen effect and normal or low urinary gonadotropin excretion, regular ovulatory menses may not return for a year or longer.⁹ In such cases restoration of normal levels of gonadotropin excretion and increased cornification of vaginal epithelium may indicate improvement long before

resumption of spontaneous menses and ovulation occur.

It should be emphasized that the presence of androgenic changes such as hirsutism, acne, or elevated urinary 17-KS excretions are not essential criteria for the use of low dosage cortisone therapy. Many women with no changes of this nature whatsoever have responded nicely, indicating the presence of a causative factor from the adrenal cortex other than androgen. It appears likely that this unknown factor is adrenal estrogen.

It should also be emphasized that the occurrence of ovulations does not preclude therapy of this type. Patients with regular menses but abnormal luteal phases and infertility have conceived shortly after starting cortisone therapy. It has been demonstrated that the administration of cortisone acetate, 5 mg. every eight hours, on days eight, nine and ten of each cycle may restore regular ovulations without restoring fertility, whereas the administration of the same dose throughout the entire cycle restored both.⁹

MEDICAMENT RATIONALE

The rationale for the use of small doses of estrogen in ovarian dysfunction due to abnormalities in the biochemistry of the ovaries is similar to that for the use of low-dosage cortisone therapy in abnormalities of adrenal steroid metabolism. With relative enzymatic defects in estrogen pathways, excess of precursors, some of which are androgens and 17-KS precursors, may occur, apparently as a result of increased stimulus from pituitary gonadotropin. The administration of small doses of estrogen, usually between 0.1 and 0.6 mg. estrone sulfate daily, restores urinary gonadotropin, estrogen and 17-KS levels to normal, with resumption of regular, ovulatory menstrual cycles.¹⁰ Such patients sometimes show clinical manifestations of varying degrees of estrogen deficiency, but not necessarily so, depending upon the severity of the enzymatic defect and the capacity of the ovaries to compensate. There appears to be no advantage in administering estrogen more frequently than one dose daily, but it seems to be advisable to stop estrogen therapy during menses in order to obtain better shedding of the endometrium.

In clinical disorders of ovarian function, a larger number of patients improve with low dosage cortisone than with low dosage estrogen therapy, the ratio being approximately 8:1, indicating that mild disorders of adrenocortical function are a more frequent cause of ovarian dysfunction than primary defects in the ovaries. As mentioned above, a few women obtain greater benefit from

a combination of the two, consistent with their having mild defects in both ovaries and adrenals.

It is therefore evident that interesting developments have occurred in the field of ovarian dysfunction in recent years, but that additional study and experience are needed to determine the proper place for each therapeutic agent. Meanwhile, physicians should not overlook the rational, effective and safe employment of small doses of cortisone or estrogen while awaiting further evidence regarding the more dramatic but potentially hazardous effects of the ovulatory stimulators. ★★★

2065 Adelbert Rd. (44106)

REFERENCES

1. Ryan, K. J., and Smith, O. W.: Biogenesis of Steroid Hormones in the Human Ovary, in *Recent Progress in Hormone Research*, vol. 21, edited by Gregory Pincus, New York, Academic Press, 1965, p. 381.
2. Barlow, J. J.: Adrenocortical Influences on Estrogen Metabolism in Normal Females, *J. Clin. Endocrinol.* 24:586, 1964.
3. Jefferies, W. McK.: Symposium on Infertility: The Endocrine Glands other than the Gonads, *Clin. Obst. & Gynec.* 8:73, 1965.
4. Everett, J. W.: Evidence in the Normal Albino Rat that Progesterone Facilitates Ovulation and Corpus Luteum Formation, *Endocrinology* 34:136, 1944.
5. Pfeiffer, C. A.: Effects of Progesterone on Ovulation in Rhesus Monkeys, *Anat. Rec.* 106:233, 1950.
6. Whitelaw, M. J.; Nola, V. F., and Kalman, C. F.: Irregular Menses, Amenorrhea and Infertility Following Synthetic Progestational Agents, *J.A.M.A.* 195:780 (Feb. 28) 1966.
7. Gemzell, C.: Experiences with Human Pituitary Gonadotropins, in *Ovulation*, edited by R. B. Greenblatt, Philadelphia, J. B. Lippincott Company, 1966, p. 98.
8. Greenblatt, R. B.: Induction of Ovulation with Clomiphene, in *Ovulation*, edited by R. B. Greenblatt, Philadelphia, J. B. Lippincott Company, 1966, p. 134.
9. Jefferies, W. McK.: Glucocorticoids and Ovulation, in *Ovulation*, edited by R. B. Greenblatt, Philadelphia, J. B. Lippincott Company, 1966, p. 62.
10. Jefferies, W. McK.; Michelakis, A. M., and Weir, W. C.: Use of Small Doses of Estrogen in Ovarian Dysfunction, *Fertil. and Steril.* 15:317, 1964.

ALL PRESENT

The governor of a certain unnamed state boarded a commuter train on which a number of mental patients were being transferred to a nearby hospital. The physician in charge of the patients went through the car to check and see that all were safely aboard.

"One, two, three, four, five . . ." He stopped at the seat of the well dressed man.

"Who are you?" the doctor asked.

"Oh, I'm the governor," was the response.

"Six, seven, eight. . . ."

—Jimmy Ward in the *Jackson Daily News*

Radiologic Seminar LXI: The Significance Of Gas Shadows in the Biliary Tree

F. J. HAMERNIK, M.D.
Vicksburg, Mississippi

THE RADIOGRAPHIC demonstration of gas or barium in the biliary tree is generally indicative of the existence of an internal biliary fistula. Fistulas of this type may be found following surgery, most commonly after a cholecystostomy or in conjunction with postoperative strictures of the common hepatic and common bile ducts. The majority of those fistulas found where surgery has not previously been performed are due to biliary tract disease associated with stones. Most of these are found to be of the cholecystoduodenal type. Cholecystocolic and less often cholecystogastric fistulas are occasionally found.

Less than 10 per cent of these lesions appear to be due to peptic ulceration with perforation from the duodenum or distal stomach into the gallbladder or common duct.

Carcinoma of the gallbladder, bile ducts, or other nearby structures as a cause for internal biliary fistula would appear to be quite unusual. A rare cause for air or barium being found in the duct system is the apparent retrograde passage of the medium through a patent sphincter of Oddi.

Two cases from our files are presented which resulted from the more common causes of inflammatory and calcareous biliary tract disease.

CASE 1

A 55-year-old white female had a cholecystectomy in 1940 for cholecystitis associated with stones in the common duct. Seven years later she

was explored because of recurrent upper abdominal symptoms and a common duct stricture was found with repair being done. In 1959 air was detected over the right upper quadrant on abdominal films and has been seen on several other studies since. She has been relatively asymptomatic insofar as evidence of biliary tract disease is concerned. This enterobiliary fistula thus became evident after a second surgical procedure at which time repair of a common duct stricture was performed.



Figure 1. Case 1. Note gas in liver area outlining biliary radicles.

Sponsored by the Mississippi Radiologic Society.

CASE 2

This was a 50-year-old white female who had signs and symptoms of acute gallbladder disease. Cholecystogram showed no concentration of opaque material in the gallbladder. Gas was noted in the biliary tree indicating a probable internal biliary fistula. At surgery massive adhesions and inflammatory tissues were found in the right upper quadrant. Gallstones were found and a cholecystectomy performed. The exact site of the fistula was not identified at surgery. ★★★



Figure 2. Case 1. Biliary tree outlined by barium during routine upper gastrointestinal study.

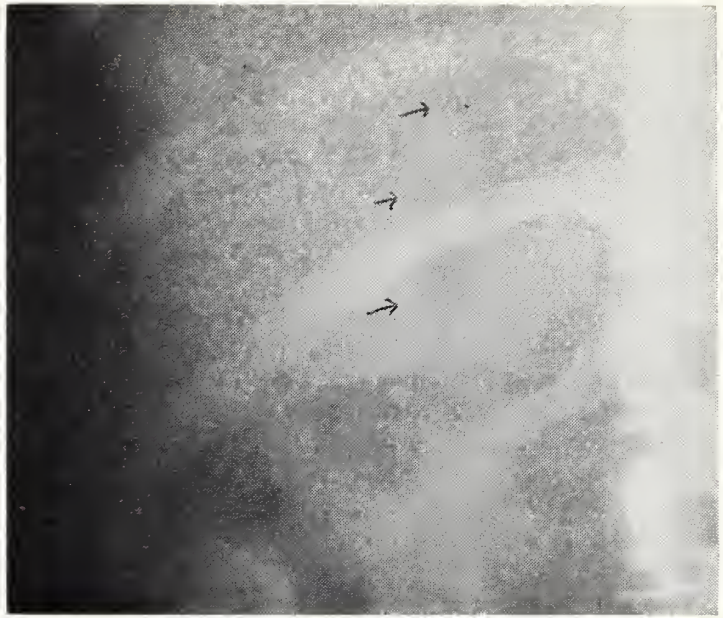


Figure 3. Case 2. Film made prior to surgery showing gas in liver area outlining portions of the biliary tree.

1600 Monroe St. (39180)

REFERENCES

1. Netterville, Rush A., and Middleton, William A.: Spontaneous Internal Biliary Fistulas, *J. Miss. State M. A.* 7:597-602, 1966.
2. Marshall, Samuel F., and Polk, Rothwell C.: Spontaneous Internal Biliary Fistulas, *Surg. Clinic N. Amer.* 38:679-691 (June) 1958.
3. Bergner, Lloyd H.: Internal Biliary Fistulas, *Am. J. Gastroenterology* 43:11-22, 1965.

PROFESSIONAL KNEED

At the scientific meeting of the psychiatric society, the pretty female psychiatrist was seated next to a male colleague. As the lights were dimmed for the essayist's slides, the male placed his hand on her knee.

Just as she was about to object, her professional training prevailed as she reasoned to herself: "After all, it's *his* problem."

Cancer of the Nasopharynx

S. G. MOUNGER, M.D.
Greenwood, Mississippi

THIS IS ONE of the most highly malignant tumors of the upper respiratory and alimentary tracts. While it does not account for more than 2 per cent of all cancers in the white race, its incidence in the Chinese for some reason runs much higher.

Fully one-fourth of the cases occur in the age group under 30 years. As in most cancers of the head and neck, the vast majority, 80 per cent, occur in males.

Since most of these cases arise from adenoid tissue, it is to be expected that highly anaplastic epidermoid carcinomas and lymphosarcomas should make up a large proportion of the total cases.

Few if any symptoms are to be expected in the early stages. There is a mass in the neck in 40 per cent and nasal symptoms (e.g. nosebleed, purulent nasal discharge, persistent blocked nose) in about 25 per cent. About 90 per cent of the patients complain of sore throat.

Deafness, tinnitus and pain in the ear or unilateral headache occur in about 6 per cent as the initial symptom.

A characteristic feature of this disease is its tendency to extend intracranially and to the orbit. The fossa of Rosenmuller is practically always involved early in the course of the disease, and since this fossa lies directly under the foramen lacerum, it is natural that the cancer will extend by direct continuity of soft tissues up through this foramen, into the cranium, a distance of only 1 cm.

In addition to localized pain, diplopia and vomiting, the symptoms of such extension are progressive unilateral involvement of the cranial nerves. The 6th nerve passes directly over the

foramen lacerum and hence is usually the first one involved. The 3rd, 4th, and 5th nerves are next in frequency of involvement. The orbit is involved in 4 per cent of the cases. The tumor enters the orbit through the superior orbital fissure. The 2nd, 3rd, and 4th nerves enter the orbit through this fissure and may all be involved causing exophthalmos ophthalmoplegia and eventual blindness.

Cancer of the nasopharynx is one of the most highly malignant tumors of the upper respiratory and alimentary tracts. The author discusses symptoms, diagnosis and treatment and presents a case report.

The lymphatics of the nasopharynx originate mainly in the pharyngeal tonsil or adenoid and run laterally and downward on the pharyngeal aponeurosis into the median and lateral retropharyngeal lymph nodes. The collecting trunks terminate, for the most part, in the upper nodes of the spinal accessory chain under the upper end of the sterno mastoid muscle, also in the subdigastric node of the internal jugular chain. From these nodes, branches run down to the middle and lower groups of the internal jugular and spinal accessory chains.

With this rich chain of lymphatics, it is not surprising that metastasis to the cervical nodes occurs in 65 per cent of cases and as a first symptom in fully 40 per cent.

Systemic metastasis are more frequent with cancer of the nasopharynx than with most other growths of the upper respiratory and alimentary tracts. At the Memorial Hospital Head and Neck

Read before the 86th semi-annual meeting of the Delta Medical Society, Greenville, Oct. 12, 1966.

Clinic, Hays Martin found that 30 per cent had clinical radiological or histological evidence of neck spread in the 310 cases of this disease which died in less than five years.

There is probably no other form of cancer in which anatomic diagnosis is more often delayed or entirely missed than in cancer of the nasopharynx. In another series Thomas and Waltz found that of 381 patients with nasopharyngeal tumors at the Mayo Clinic from 1950-1963, 113 (30 per cent) were found to have neurological abnormalities.

This may be due to the fact that in only half the cases does the primary lesion produce any local symptoms.

Progressive unilateral deafness or unexplained cervical lymph node enlargement in the adult should suggest such a possibility.

The simplest and most efficient method of examining the nasopharynx is by use of a throat mirror in the pharynx while depressing the tongue and retracting forward the free edge of the palate. The use of the nasopharyngoscope itself is not nearly as effective a method as this, since one gets such a limited view through the lens system.

A biopsy of the tissue of any suspicious area is indicated. One single negative biopsy should not be considered conclusive, for in no other area of the body is cancer so apt to be overgrown with chronic hypertrophied lymphoid or granulation tissue.

BIOPSY TECHNIC

A straight biopsy forceps introduced through the nose or a curved biopsy forcep introduced through the mouth may be used.

Since the nasopharynx is comparatively inaccessible to surgical exposure (the area is extremely vascular, the growths are poorly delimited, and there is frequent early extension of the disease into the cranium), the primary lesion must be considered unsuitable for adequate surgical removal.

On the other hand, however, the nasopharyngeal cancer is the most sensitive of all tumors to irradiation. For these reasons irradiation is the preferable mode of treatment. With the improvements that have been made in radiation therapy the prognosis is not by any means hopeless and compares favorably with that of cancer of the tongue. It is less favorable in children than in mature individuals. Of 420 cases followed at Memorial Hospital from 1932 to 1952, only 69 cases were living and free of the disease at the end of the five years, giving a net five year survival of 16.4 per cent.

CASE REPORT

I was only able to find three definite cases of cancer of the nasopharynx in the past 10 years at our hospital. The most recent case is the subject of this report.

This is a 10-year-old colored female who came to my office first on July 12 complaining of nosebleed. On questioning, the mother stated that the child had been listless, apathetic and weak for several months. She had had moderately profuse nosebleeds off and on, and on occasion had fainting spells, or, as the mother said, "falling out spells" following the nosebleed. There was marked nasal blocking and a foul serosanguineous nasal discharge.

She had maintained a good appetite and had no symptoms referable to the GI tract except occasionally she had vomited blood. Review of other systems was essentially normal. There was no pain and only occasional headaches.

PHYSICAL EXAMINATION

Physical examination revealed a well-developed, fairly well nourished colored girl 10 years old—not acutely ill but obviously rather weak and listless. The head was normal in size and shape. She had the typical appearance of one with adenoid facies, a mouth breather. Eyes reacted to light, and accommodation, motility was normal and visual acuity normal. The conjunctiva was pale.

Examination of the nose showed the mucous membrane was pale with much serosanguineous discharge. An attempt to pass a soft rubber catheter through the nose was unsuccessful on either side.

There was a fullness of the soft palate and on elevating the uvula, one could see a mass of fungating material up behind the soft palate. The neck showed no rigidity or tenderness, but there were several firm glands along the sternocleidomastoid and some could be palpated in the post aspect of the neck.

The rest of the physical examination was essentially negative.

LABORATORY FINDINGS

She was admitted to the hospital on July 22, 1966. The lab reported hemoglobin of 5 gm. 33 per cent, hematocrit 22 per cent—2 nucleated RBC per 100 cells and marked hypochromia. Sick cell prep was negative. She was given one pint of blood which brought her RBC up to 3,220,100, hemoglobin 57 per cent, hematocrit 30 per cent. Another pint of blood was given on

NASOPHARYNX / Mounger

July 23 bringing her hemoglobin up to 69 per cent. On July 25 a biopsy was done under general anesthesia. A lymph gland was removed from the left side of the neck and a sufficient amount of material was removed from the fungating lymphoid mass in the nasopharynx. A large postnasal pack was inserted to control the bleeding. Her postoperative condition was good but another pint of blood was given. There was only moderate postoperative bleeding. On July 26 the postnasal pack was removed.

X-ray of the head did not show any invasion of bone or evidence of intracranial spread, and x-ray of lungs was normal. After consultation with the x-ray department, it was thought best to refer

her to the University of Mississippi School of Medicine for cobalt therapy and this was done on July 28. The cobalt therapy was begun while the patient was in the hospital and subsequently continued on an outpatient basis. She had an uneventful stay in the hospital and was discharged on Aug. 5 to continue her cobalt treatment.

The biopsy reports were anaplastic epithelial tumor of upper respiratory tract (apparently of Sneiderian mucosal origin). The lymph gland was felt to be metastatic cancer. She seems to be progressing nicely now.

This discussion was presented as a reminder that cancer of the nasopharynx does occur relatively frequently and that it is often overlooked until late in the disease. ★★★

310 Dewey St. (38930)

PREVENTIVE MEDICINE

The medical officer had finished his rounds on a sanitary inspection at a remote Viet Nam outpost. Turning to an obviously raw recruit, he asked: "What precautions do you take with the drinking water?"

"Sir, we boil it first," the rookie replied.

"Good," said the medical officer. "And then what?"

"Then we filter it, sir," he said.

"Excellent," exclaimed the medic.

"And, then, sir, just for safety," the recruit continued, "we drink beer instead."

Clinicopathological Conference LXXXVII

Conducted by the Department of Pathology
Mississippi Baptist Hospital
Jackson, Mississippi

THIS 70-YEAR-OLD, white male was first admitted to the Baptist Hospital on August 30, 1965, with the chief complaint of pain in chest, cough, painful hemorrhoids, and marked shortness of breath. The patient was a known bootlegger and had been a chronic imbibor for many years, but had only indulged heavily during the past three months following the death of his wife. He had had no dysuria, some nocturia, no weight loss but no appetite.

Physical examination revealed an elderly, depressed, white male who while under the influence of alcohol was most cooperative. He was constantly coughing and short of breath. His blood pressure was 120/80, pulse 80, respiration 14, and temperature 98.4. His tongue had a thick, white coat. There were no palpable nodes in neck. There were some moist rales in both lung fields posteriorly. Breath sounds were normal.

The heart showed no evidence of enlargement, and there was no evidence of failure. The abdomen was soft. There were no palpable masses or organs. The rectal examination showed protruding hemorrhoids with some ulceration. The prostate was not enlarged. The legs showed some pitting edema.

Laboratory data on admission were as follows: white blood count 11,600 with 80 per cent neutrophils, 10 per cent lymphs, 5 per cent bands, and 5 per cent monocytes; hemoglobin 13.6 gm. per cent; hematocrit 41 vol. per cent; sedimentation rate 26. Urinalysis showed 0-5 white blood cells and 1+ albumin; cephalin flocculation 0; creatinine .9 mg. per cent; urea nitrogen 11 mg. per cent; SGOT 16 and LDH 400 units. EKG was within normal limits, with some premature atrial beats.

X-ray examination of the chest showed emphysema and fibrosis. A cholecystogram and an

upper GI series were within normal limits. A barium enema revealed diverticulosis of the sigmoid. During his stay in the hospital he had hot packs to the rectum; he was put on a high caloric, high vitamin diet and normal sedations for a depressed alcoholic. He was discharged improved on September 9, 1965.

In CPC LXXXVII, Dr. William H. Rosenblatt discusses the case of a 70-year-old white male who was first admitted with the chief complaint of pain in the chest, cough, painful hemorrhoids and marked shortness of breath. He was a known bootlegger and had been a chronic imbibor for many years, but had only indulged heavily during the past three months following the death of his wife. Other discussers are Drs. Robert P. Henderson and Louis Schiesari.

After discharge he did well for a few days and then began to drink heavily. He was readmitted on November 21, 1965, complaining of severe cough, shortness of breath and aching of all joints. A sputum culture was negative for pathogens. EKG made on this admission showed auricular fibrillation. The blood count and the urine examination were not significant. He was placed on inhalation therapy which gave him marked relief from his breathing difficulty.

He expectorated a large amount of sputum which was never blood-tinged. He was discharged after a week of hospitalization and readmitted two days later complaining of alternate periods of diarrhea and constipation, and of severe weakness. There was no blood in the stools. His cough

had been somewhat less of a problem, but he continued to be markedly short of breath. On this admission he appeared to be chronically ill. The only significant finding other than what had been previously reported was some tenderness in the epigastrium with still no palpable liver.

The blood count was 16,200 with 84 neutrophils. A portable chest film showed what appeared to be cardiac enlargement and dilatation with congestive changes in the lungs. There was suggestion of some fullness of the mediastinum.

His condition remained unchanged until the morning of Dec. 7 when he became cyanotic with a rapidly falling blood pressure, having had a profuse diarrhea during the previous night. The temperature was normal as it had been on his previous admissions. He had severe shortness of breath and cough and no definite pain.

A cardiologist was called in consultation after this episode. The patient's course was progressively downhill, with his blood pressure dropping continuously in spite of Levophed. He expired on the seventh day after admission.

Dr. William H. Rosenblatt: "Essentially this is the case of a 70-year-old, white male who was initially admitted to the Baptist Hospital on August 30, 1965 because of chest pain and died some three months after the first admission on December 7, 1965. As stated in the protocol, this man was a bootlegger and admittedly a chronic imbibor for many years, with an unusually heavy alcohol intake for some three months following the death of his wife.

LOSS OF APPETITE

"He had a poor appetite and was probably suffering from malnutrition. He also had a cough which was chronic and toward the end of his illness quite productive of large amounts of sputum which was never blood-tinged. He suffered with shortness of breath that likewise persisted. No mention is made of whether or not he was orthopneic or suffered from paroxysmal nocturnal dyspnea.

"It would appear, at least from an x-ray standpoint, that he was suffering from pulmonary emphysema and likely had some evidence of chronic bronchitis to account for the chest symptomatology. I gather that congestive heart failure was ruled out as was pulmonary infarction. No mention is made of the location of the chest pain, its characteristics, or whether or not it radiated.

"At the time of his initial admission to the hos-

pital, I assume that myocardial infarction was considered because of his chest pain (and rightfully so, in an individual in this age group) since an electrocardiogram was performed along with at least one SGOT determination and one LDH determination. His serum enzyme levels were within the limits of normal, and the electrocardiogram was certainly normal, showing only premature atrial beats with no evidence of myocardial infarction. Dr. Louis Schiesari was kind enough to allow me to see this cardiogram.

"No mention is made of cardiac size or unusual contour of the great vessels on this examination, and I would have to assume that the heart and great vessels presented no abnormalities at that time. Could we see the initial chest x-ray?"

RADIOLOGIC FINDINGS

Dr. Robert P. Henderson: "The heart appears to be normal in size and contour (Figure 1). A slight prominence and 'stringiness' to the left hilar region appears to be present. The lungs show generalized emphysema and no atelectasis or consolidation is seen. The aorta is not dilated or tortuous."

Dr. Rosenblatt: "At the time of this admission, which was the initial admission, the patient presented no symptoms referable to the GI tract other than painful hemorrhoids, and I assume that



Figure 1

the GI series was performed in an effort to find the source of the chest pain. The only abnormalities were lower down, mainly in the colon, where diverticulosis of the sigmoid colon was found.

"The laboratory work performed during this admission is unrevealing, the only abnormalities being a slightly increased white blood cell count of 11,600 with 80 per cent polys; a 1+ albuminuria and a surprisingly negative cephalin flocculation test for a man who admittedly was a heavy imbibor of alcohol. The albuminuria apparently was not related to impaired renal function since his creatinine was .9 mg. per cent and the BUN 11 mg. per cent.

"In a heavy alcohol consumer, one would certainly have expected to find some derangement in liver function tests; but I will have to assume, at least from a laboratory standpoint, that there was no evidence of cirrhosis of the liver and throw this out as a contributory cause for his eventual downhill course. No serum protein levels are reported, and at this point I don't know if any were done, but I gather there were not. Therefore, I am at a loss to explain the pedal edema.

INITIAL ADMISSION

"At the time of his first admission, apparently it was the belief of those who attended this man that his main problem was that of malnutrition secondary to alcoholism and he was so treated, with improvement, and discharged on September 9, 1965 or some 10 days following the initial admission to the hospital. It is stated that after discharge from the hospital he did well for a few days and then began to drink heavily. Now, whether this was heavier drinking than he admitted to prior to this admission or not, we do not know. As a matter of fact, we do not know exactly how much alcohol this man consumed, but I am forced to accept the fact that the amounts were excessive. This reminds me of the cigarette smoker who feels that a heavy cigarette smoker is someone who smokes more than he does.

"On November 21, 1965 he was readmitted to the hospital, again complaining of severe cough with shortness of breath and aching of all joints. No mention is made of chest pain at this time. However, in the face of a heavy alcohol intake it is possible that his pain threshold was high, and he may not have been sensitive to pain. The electrocardiogram at the time of the second admission showed atrial fibrillation. I have not seen this tracing, but I will assume that it did show atrial fibrillation, and I gather that it is not available, so we will leave that point as is.

"Other laboratory studies at this time consisted of a blood count and urinalysis which were reported to be not significant. I suspect that it was the belief of those caring for him that bronchopulmonary disease such as chronic bronchitis and emphysema was responsible for his symptomatology, and he was placed on inhalation therapy, with marked relief from his breathing difficulties.

FINAL HOSPITALIZATION

"He was again discharged after a week of hospitalization and then readmitted finally, two days later, complaining of alternate periods of diarrhea and constipation and severe weakness. Again no mention is made of chest pain during this admission, and I assume that the atrial fibrillation which he experienced during the previous or the last hospitalization before this was treated with digitalis. It is possible that his bowel symptoms might have been related to this drug, and that the weakness was secondary to loss of electrolytes in the stools. No blood is reported to have been found in the stools.

"On his final admission it is said that the man appeared chronically ill, and the only striking difference in his findings compared to those on previous examinations was tenderness in the epigastrium, on which I shall elaborate shortly. This time his white blood cell count was reported to be 16,200 which shows a progressive increase from the time of initial hospitalization. We find no report of his hematocrit and hemoglobin at this point, and I assume that since it is not in the protocol this was probably again within the limits of normal.

"A portable chest film at this final admission showed what appeared to be cardiac enlargement and dilatation with congestive changes in the lungs, and there was a suggestion of some fullness in the mediastinum. I wonder if we could see that film?"

CARDIAC ENLARGEMENT

Dr. Henderson: "This portable film (Figure 2) magnifies the heart considerably. Taken from anterior to posterior in ICU, it is hard to get even 40 inches. However, this film seems to show increase in the cardiac size. A wide mediastinum is again difficult to evaluate on a portable film. The aorta is poorly outlined and cannot be seen as a separate shadow in the descending thoracic portion. The lungs show a slight exaggeration of markings but no congestive change."

Dr. Rosenblatt: "Thank you, Dr. Henderson, but you have not helped me too much. At any

rate, this man's condition remained unchanged until, I gather, suddenly on the morning of December 7, 1965 he became cyanotic and had a rapidly falling blood pressure preceded by a profuse diarrhea during the previous night. His temperature is said to have been normal as it had been on his previous admissions. He had severe shortness of breath and cough but no definite pain. His course was progressively downhill and his blood pressure continued to drop continuously in spite of Levophed and a cardiologist, and the patient died.

"So, in effect, we have a 70-year-old male with chronic bronchopulmonary disease. He was an alcoholic probably suffering from malnutrition, who initially presented with chest pain and evidence of diverticulosis of the sigmoid colon with findings consistent with arteriosclerotic cardiovascular disease as manifested by atrial fibrillation and what was reported to be congestive heart failure. He died suddenly and unexpectedly, and as the newspapers would say, 'after a brief illness.'

"I feel that we can reasonably eliminate acute myocardial infarction on the basis of the laboratory data presented, along with the two electrocardiograms which I did have an opportunity to review. The first tracing that was done on August 31, 1965 was essentially normal, with an occasional auricular premature beat, but otherwise no abnormal changes. The second cardiogram, which was dated December 7, 1965, the day the man died, showed changes consistent with digitalis effect, but I still don't know whether this man received digitalis or not. I don't think it's going to make a lot of difference in the outcome but the tracing did show some ST segment sagging in the limb and precordial leads that suggests digitalis effect.

NO PULMONARY EVENT

"Likewise, I feel that we can rule out a catastrophic pulmonary event such as a pulmonary infarction on the basis of x-ray findings and the isolated LDH reading of 400 units. The diarrhea which he exhibited puzzled me, and I consulted a gastroenterologist, Dr. Sam Stephenson, about this and he wasn't too impressed with diarrhea associated with diverticulosis or diverticulitis of the colon.

"Of course, with the profuse diarrhea there could have been a marked fluid loss with electrolyte imbalance and a dropping blood pressure possibly precipitating an acute myocardial infarction, but I doubt if this occurred. I believe that

we ought to consider perforation of the diverticulum with peritonitis and shock, but from the information that we have at hand I think that we can exclude it because there is little in the protocol to support it.

MALIGNANT CARCINOID

"There is one condition that has bothered me ever since I was presented with this protocol, which hasn't been too many hours ago, and that is a malignant carcinoid. This sort of a thing I have never seen personally, but it can be associated with diarrhea, profuse diarrhea. There is no mention in the protocol of a urinary test of 5-hydroxyindolacetic acid. There is no suggestion, at least in the protocol, of flushing or a violaceous tinge to this man's skin, and this bothers me. I still can't exclude malignant carcinoid here.

"No mention is made at any time in the protocol of another condition, high blood pressure, and no mention is made of bruits or changes in volume of pulses in the extremities or neurologic localizing symptoms. I suspect that some cardiovascular catastrophe—namely aortic dissection—did occur or else they wouldn't have called a cardiologist in. The only tiny clue that I have to arrive at what I'm going to hang myself on here tonight is that of the x-ray report of some fullness of the mediastinum. The fullness in the mediastinum coupled



Figure 2

with chest pain at the time of his initial admission along with the progressive downhill course and terminal shock, with cyanosis, leads me to be suspicious of chronic aortic dissection.

"Ordinarily, we consider aortic dissection to be associated with hypertension and a rapidly fulminating and fatal course since the ascending aorta is involved in more than half the cases. On the other hand, some 20 per cent of aortic dissections do occur beyond the left subclavian artery, and these patients may survive weeks and even months prior to rupture. While there is again no mention of hypertension in this individual, we do know that aortic dissection can occur in its absence. I am of the opinion that he probably did have some type of aortic medial disease of the thoracic aorta possibly related to protein deficiency and alcoholism or, remotely, atherosclerosis of the vasa vasorum with a resulting cystic medial degeneration and necrosis with hematoma formation.

INDUCED DEFECTS OF AORTA

"Dietary defects in the aorta have been produced experimentally and have been reported on by Bean¹ where defects were produced in the media of rats fed sweet pea meal. There is no description in the protocol of this man's body build that suggests Marfan's syndrome and certainly nothing to suggest coarctation of the aorta or other conditions associated with aortic dissection. Other conditions that I would like to mention in passing, and exclude, would be primary myocardial disease or the myocardiopathies, cardiac tumors and possibly even pancreatic malignancy. There is little to support any of these in the protocol.

"So, in conclusion, while I cannot completely rule out the conditions that I have mentioned, I realize that I am on thin ice when I establish a diagnosis of chronic aortic dissection in the absence of arterial hypertension. However, it is not customary in such conferences to present the usual case, and this may be the unusual here tonight. I wouldn't be surprised if cystic medial disease was found at the time of autopsy, with dissection of the aorta proximally and distally, the distal dissection being reflected by the epigastric tenderness and, remotely, the diarrhea by ischemia of the GI tract by dissection along the course of the mesenteric vessels; the proximal dissection rupturing into the pericardial sac and producing death by cardiac tamponade with shortness of breath, cyanosis, and shock. I also cannot exclude rupture into the left pleural space

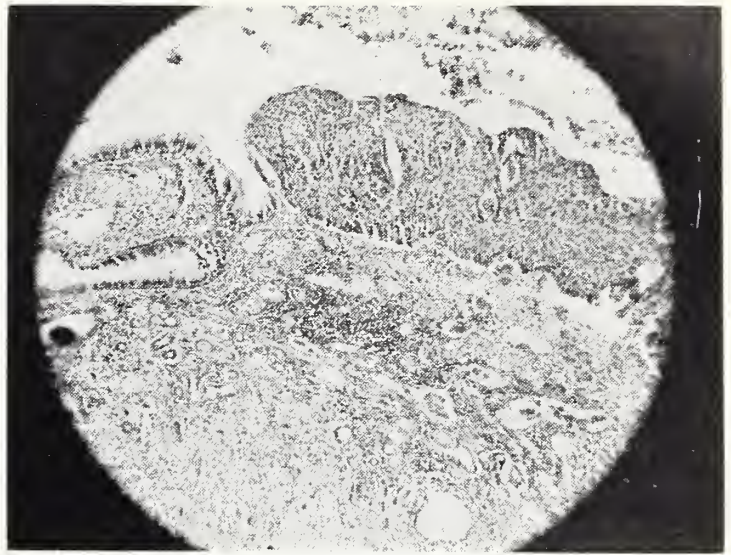


Figure 3

which quite commonly occurs in this disease."

Dr. Louis Schiesari: "When both the attending physician and the consultant expressed their desire to be present at the autopsy, I thought that we were dealing with an unusual case, and I went through the chart trying to make my own diagnosis which then proved to be wrong. We all fell in the same trap, including Dr. Rosenblatt, who, on the other hand, through an excellent discussion based on the admittedly meager information in the protocol, has carried the audience to the most logical conclusion. So you can imagine our surprise in finding a normal heart at the autopsy table.

"However, the pericardium wasn't normal. The pericardial cavity contained about 400 cc. of bloody fluid. The pericardial sac was tightly adherent to and encased in a tumor mass which occupied the posterior mediastinum. This mass extended into the left pulmonary hilus surrounding the major branches of the bronchial tree and infiltrating the immediately surrounding pulmonary parenchyma. Upon completion of the autopsy, having ruled out a primary site anywhere below the diaphragm, we were still unable to tell whether the tumor had originated in the left lung or in the mediastinum.

MICROSCOPIC FINDINGS

"The microscopic examination gave us the correct answer. This slide (Figure 3) clearly shows that the carcinoma arises from the bronchial epithelium and that this is an epidermoid carcinoma of the undifferentiated or transitional or spindle cell type. Perhaps the best name for this type of tumor would be non-keratinizing epidermoid carcinoma. As you can see, this is the

exact replica of the same type of carcinoma of the uterine cervix.

"Also present in the same section is a portion of lung parenchyma invaded and completely replaced by the carcinoma, which, already at this low magnification, seems to be somewhat different from that in the bronchus. At a higher magnification (Figure 4) the difference is more striking; gland-like spaces lined by large cells with abundant, often water-clear cytoplasm. If this slide represented a section from a surgical specimen, it would be impossible to tell whether this is a primary or metastatic carcinoma and, if primary, what type of lung carcinoma we are dealing with.

"I bring this up to make you aware of the great difficulty encountered sometimes by the pathologist in making a diagnosis of primary carcinoma of the lung. There is no complete agreement either on their origin or classification. For example, there is a group of British pathologists who deny the existence of the alveolar cell carcinoma as a primary entity. For them, it is nothing but a bronchogenic carcinoma from the large bronchi that has spread to the periphery growing along the alveolar wall, giving finally the impression of a primary broncho-alveolar tumor. Dr. Liebow,² an authority in lung pathology in this country, stated that a diagnosis of primary carcinoma of lung can be made with certainty only when a complete autopsy has been performed.

"Going back to our case, we can say first that this is a primary carcinoma of lung because we

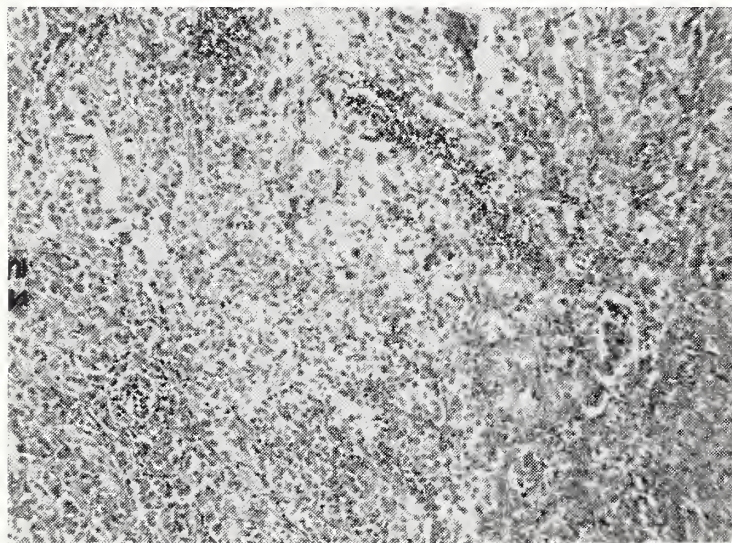


Figure 4

did a complete autopsy, and second that this is a bronchogenic carcinoma of the undifferentiated epidermoid variety because we were fortunate

that one of our sections went across the site of origin of the carcinoma in a major bronchus. Without this information a diagnosis of the type of carcinoma in this case would have been impossible.

"That this was a highly malignant type of tumor is demonstrated in the next slide (Figure 5) where

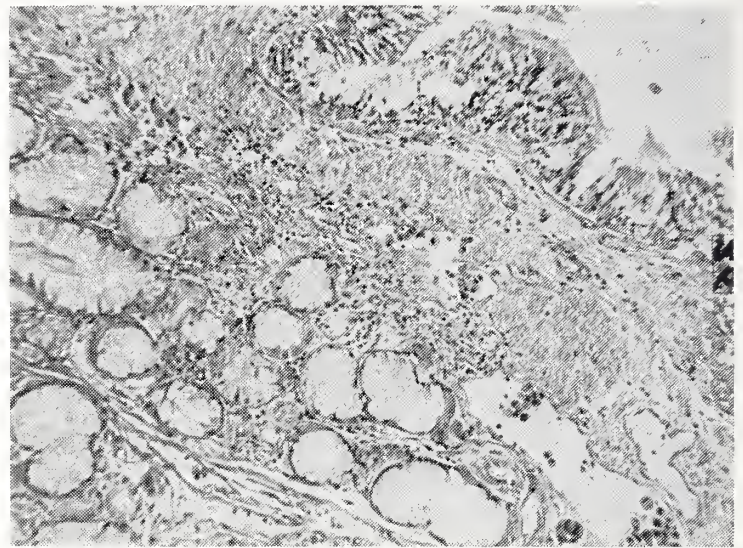


Figure 5

you can see that all the lymphatic spaces contain tumor cells. Through these spaces the carcinoma metastasized to the mediastinal lymph nodes, pericardium, adrenal glands, retroperitoneal lymph nodes, wall of stomach and intestine. From a diagnostic point of view, a sputum examination, because of the still intact malignant epithelium lining a bronchus, would have yielded most certainly a positive result."

Dr. Henderson: "This case illustrates the occasional severe limitation of a PA chest in evaluating the patient with pulmonary or cardiac symptoms. A left lateral film is not a routine at this hospital, although we encourage the staff to request a lateral anytime a significant abnormality is suspected. When any abnormality is seen on the PA chest, we usually obtain lateral and oblique views for further evaluation. I feel that in this particular case that a left lateral film would have been of great help in establishing a diagnosis of a significant pulmonary lesion." ★★★

1900 North State St. (39201)

REFERENCES

1. Bean, W. B., and Ponseti, I. V.: Dissecting Aneurysm Produced by Diet, *Circulation* 12:185, 1955.
2. Liebow, A. A.: Tumors of Lower Respiratory Tract, Sect. V, fasc. 17, *Atlas of Tumor Pathology*, U. S. Armed Forces Institute of Pathology, 1952.
3. Shinton, N. K.: The Histological Classification of Lower Respiratory Tract Tumors. *Brit. J. Cancer* 17:213, 1963.

Coronary Heart Disease:

Part III

WILLIAM H. ROSENBLATT, M.D.
Jackson, Mississippi

IN THE MANAGEMENT of the acute myocardial infarction, there are several serious complications to be encountered. Shock would probably rank as the number one killer in acute myocardial infarction, with arrhythmias second, congestive heart failure third, thromboembolism fourth, and cardiac rupture last. If we were to consider the mortality rate of acute myocardial infarction patients in the first 21 days or customary period of hospitalization, we would find that the overall mortality rate would be in the range of 20 to 25 per cent, the greatest mortality rate in acute myocardial patients taking place in the first 48 to 72 hours.

The reasons for this high mortality rate in the early stage of acute myocardial infarction are the development of cardiac arrhythmias, shock or congestive heart failure. This constitutes 50 per cent of the overall mortality rate in acute myocardial infarction patients. If the acute myocardial infarction patient can be tided over the first 48 to 72 hours, after that the mortality rate will drop to approximately 1 per cent per day.

What do we mean by cardiogenic shock? We have to consider a typical picture of an acute myocardial infarction patient: falling blood pressure, below 80 millimeters of mercury systolic, with a rapid, weak and thready pulse. The patient is cold and clammy and there is mental apathy, which represents inadequate circulation to the cerebral centers. While talking about drop in blood pressure in shock, it should be pointed out that all patients with a low blood pressure in acute myocardial infarction do not necessarily fall into the category of shock.

In the typical picture of cardiogenic shock we have a falling systolic blood pressure, but the diastolic pressure does not drop correspondingly, and one ends up with a very narrow pulse pressure. All of us have seen patients with acute myocardial infarction who present with blood pressures of 90 or 80 over 70 or 60. They are warm,

There are several serious complications to be considered in the management of the acute myocardial infarction. These include shock, arrhythmias, congestive heart failure, thromboembolism and cardiac rupture. The author discusses the treatment of these conditions and considered pertinent questions in the question and answer section.

not sweating, and there is no mental apathy. These are the people who really do not fall into the category of shock and do not merit treatment with pressor amines. The individuals with narrow pulse pressures, low systolic and relatively normal diastolic pressures, who are cold, clammy, cyanotic and dull mentally, are the ones with whom we must be concerned. Cardiogenic shock is accompanied by a mortality rate of close to 95 per cent if not treated, perhaps 50 per cent if treated.

From the standpoint of treatment of shock, one must be careful to avoid the hazards encountered with the agents used. Levophed, for example, may get out into the surrounding tissues and the problem of tissue-slough is presented. We are all familiar with the patients who are started on one ampule of Levophed and have to be moved up to two, four, six or 12 ampules to maintain a fairly decent blood pressure. He continues to re-

Adapted from a postgraduate symposium conducted by the author at the University Medical Center, Jackson. Questions and discussion are by the symposium participants.

quire more and more, he gets colder, sweatier, more cyanotic and dies.

Therefore, given an acute myocardial infarction patient, one should try Aramine first, using a vial of 10 cc. in 500 cc. of 5 per cent glucose in water, in the hope of maintaining the blood pressure at a level that will allow adequate cerebral blood flow, coronary perfusion, and certainly, an adequate renal blood flow as manifested by a good urinary output. There may be some argument about the use of Aramine because it is believed that Aramine liberates catecholamines from the tissues of the body and might deplete the body of adrenalin and nor-adrenalin and there may be some difficulty in getting the patient off the drug.

Actually, if the blood pressure can be maintained satisfactorily with Aramine, one does not encounter the great problem that he might with Levophed when trying to withdraw the drug. It may be 10 or 15 minutes before one can be certain as to whether or not the blood pressure will level off to between 110 and 120 systolic, but the drip can always be increased. If Aramine is unsuccessful, there is not much choice but to administer Levophed. The patient may be actually moribund, and the blood pressure must be brought back up. We have all been through this too frequently.

When Levophed is employed, Regitine should be added—three or four ampules of Regitine into the drip. There are two reasons for doing this: first, Regitine will cut down on the risk of tissue slough but does not affect the pressor effect of the Levophed; second, the net effect of Regitine is that of vasodilation on the renal arterioles.

Another problem encountered with cardiogenic shock is acidosis. There are many patients who have been in shock for two or three hours and treated with the usual increments of Levophed. There are probably not many of us here, under such circumstances, who would request a blood PH on these patients. This may be the crux of the problem, where the failure rate is so high (50 per cent even with treatment). These patients are acidotic, and correction with sodium bicarbonate might be life-saving.

QUESTIONS AND ANSWERS

Dr. Benjamin F. Banahan, Jr.: "What is the mechanism of acidosis?"

Answer: "I believe that it is due to profound vasoconstriction primarily to the muscles with increased lactic acid liberation."

Dr. Paul E. Goode: "Do you always check this before using a DC converter and give them bicarbonate first?"

Answer: "No. I would suggest that you defibrillate if necessary, then give sodium bicarbonate, and then request a blood PH. Given a patient with profound shock, markedly vasoconstricted even without a serious arrhythmia, you had better give enough sodium bicarbonate to make it worthwhile. If the patient develops a ventricular arrhythmia, treat that, and be ready to give more sodium bicarbonate. In the meantime you can get a PH. I believe that you will find that you will salvage more patients from shock than you would have ordinarily had you not used sodium bicarbonate."

BLOOD PRESSURE

Dr. Goode: "I've been led to believe that it is impossible to ascertain the blood pressure in some patients using a cuff. I have been told to either put in an intra-arterial needle or else check for urine dropping out of the catheter."

Answer: "You are all familiar, I am sure, with the conscious patient with acute myocardial infarction who is in shock and you've got a drip going with a pressor amine. You feel pulses all over, carotids, radials, and femorals, but you cannot auscultate the blood pressure—you can palpate it; you don't need an intra-arterial needle. If you can't palpate a blood pressure, you may as well give up. There are precious few patients that you can save if you can only get the blood pressure by palpation. Urinary flow is an excellent criterion, but if you can get a good pressure reading by auscultation, you know that they can usually make urine."

"On the subject of digitalis, a few years ago I would probably have frowned upon the use of digitalis in acute myocardial infarction patients in shock, without congestive heart failure. I couldn't see the rationale behind it. However, when you think about it, you realize that in cardiogenic shock there is a very narrow pulse-pressure with a left ventricle that is filled with blood but can't empty effectively. Then, digitalis therapy doesn't seem quite so far-fetched because we know that it will shorten the myocardial muscle fibers in diastole and will increase the cardiac output. This can be futile, but given a patient with a very narrow pulse pressure, in shock, and being unable to raise the pressure by the usual methods, it might be worthwhile to give digitalis a trial."

"Digitalis has to be given where it can get into the circulation as rapidly as possible, obviously, intravenously. I would suggest giving Cedilanid."

In a situation such as this you may as well go all out with a full digitalizing dose. Then, of course, if the patient responds and survives, maintenance therapy is indicated.

"Steroids in cardiogenic shock have been touted by the pharmaceutical companies in the hope that they will enhance the effect of the pressor amines. I have yet to see an individual with cardiogenic shock who has responded favorably because of the addition of steroids. However, I do think there is a place for steroids in acute myocardial infarction patients as indicated previously. In posterior wall myocardial infarction, acute, with AV block, either partial or complete, I would use steroids in an effort to cut down on the inflammatory reaction about the AV node.

"Congestive heart failure in acute myocardial infarction patients is no different from congestive heart failure from any other cause. We know that the myocardium has been weakened by the infarcted area, and the first indication of failure in acute myocardial infarction might be a diastolic gallop rhythm, due to rapid inflow of blood into a flabby, ballooned-out left ventricle. The patient may not be short of breath at all, and there may be no rales in the lungs. A diastolic gallop rhythm in acute myocardial infarction is of paramount significance, and requires treatment with digitalis and mercurial diuretics just as in a patient with acute pulmonary edema. Patients with acute myocardial infarction without gallop rhythm may still be in failure, they may be a little short of breath, feel a little smothery, and yet the lung fields may be clear on auscultation. There may be a little neck vein distention when the liver is compressed (hepatojugular reflux). This is an early manifestation of congestive heart failure, sometimes referred to as subclinical congestive heart failure.

FLUID TRANSUDATION

"Acute pulmonary edema is a transudation of fluid from the pulmonary arterioles and capillaries into the pulmonary aveoli. It has not been too long ago that patients with acute pulmonary edema were given atropine "to cut down on the secretion of fluid in the aveoli." This fluid is not a secretion at all, it is a transudation of fluid from increased back pressure into the pulmonary veins into the pulmonary arterioles and capillaries. Being a transudation of fluid, it is certainly not going to be dried up by the use of atropine. The patient may feel dry, but so far as improving ventilation by cutting out secretion, atropine will have no effect whatsoever.

"The number one treatment for acute congestive heart failure is morphine sulfate intravenous-

ly. Why give it IV? If you are going to give morphine to an acutely ill patient with acute congestive heart failure, why give it in the muscle where it may take 15 to 20 minutes before it is absorbed. Give it slowly IV, one-fourth grain diluted in 5 cc. of water. There are several actions of the drug morphine: (1) it allays the fear and apprehension of the patient, (2) it depresses the respiratory center favorably in a patient with acute left heart failure, and will slow the respiratory rate, (3) it will produce a significant amount of vasodilatation peripherally in the lower extremities which is similar to phlebotomy or the use of tourniquets. Regarding tourniquets, one can pool up to 750 to 1,000 cc. of blood in the extremities by this method without mechanically removing blood as with phlebotomy. This is especially favorable in the anemia patient.

DIGITALIZATION

"Concerning digitalis, there are many preparations. Personally, I prefer three. I use Cedilanid for rapid digitalization intravenously. When dealing with acute left heart failure, this must be given rapidly, and therefore IV is the preferred method. You might ask, "What's wrong with Digoxin?" Nothing, except that I have become more familiar with the use of Cedilanid. I know that the usual digitalizing dose is 1.6 mg. intravenously, and I give this at one time. When giving an oral preparation I use Lanoxin. I would recommend 1.5 mg. initially, and then 0.5 mg. every six hours for four doses and then decide on the maintenance dose. The average maintenance dose is 0.5 mg. For slower digitalization I use digitalis leaf, one-tenth of a gram for every 10 pounds of body weight. If an individual weighs 200 pounds, my goal would be two grams over a period of a week.

"After rapid digitalization, orally or intravenously usually 24 hours later, I prescribe Lanoxin or Digoxin .25 mg. twice daily, ordering the drug day-by-day. If there are no premature ventricular contractions, and the patient is doing well, the next day I give another .25 mg. twice a day. If they are still not firing off premature ventricular contractions and are still compensated, then I elect to employ a maintenance dose of 0.5 mg. of Lanoxin daily. If there is a firing off of premature ventricular contractions, I will back up and withhold digitalis that day, dropping back the next day to .25 mg. This is the method I employ for re-digitalization.

"Regarding diuretics, in acute left heart failure, mercurials are the agents of choice, given parenterally. An aid in these patients, is to follow-

CORONARY DISEASE / Rosenblatt

up the mercurial diuretic in one hour with a dose of aminophylline slowly, intravenously, three and three-fourth grains. The rationale for this is to increase renal blood flow with the aminophylline allowing a greater presentation of salt and water to the tubules for an increased diuresis. This is quite effective."

Dr. John W. Murphy: "How do you determine how often to give oral diuretics with digitalis?"

Answer: "The best approach to that is to have the patient weigh every day once you have gotten him compensated. If he jumps up four or five pounds or more in a period of four to five days, he either needs a diuretic or he may be underdigitalized. I prefer mercurial diuretics. I do not like the oral diuretics at all because of electrolyte imbalance. If the patient is receiving digitalis, electrolyte imbalance may predispose him to digitalis intoxication."

Dr. Murphy: "What do you think of the oral diuretics with potassium?"

Answer: "I think it best that you do not use them."

Dr. Robert E. Jennings: "Are you familiar with Dyrenium that is supposed to retain the potassium?"

Answer: "I have really been unimpressed with this agent."

Dr. Goode: "What time of the day do you weigh these people?"

Answer: "It makes little difference, just weigh them daily at the same time and with the same clothing."

Question: "You don't give oral diuretics?"

Answer: "Very rarely. I prefer parenteral mercurial diuretic agents. This affords closer observation of the patient and also makes electrolyte imbalance less likely."

Dr. Joseph C. McGehee, Jr.: "Are you likely to

get into some trouble with any sort of a reaction to the mercurial?"

Answer: "I have not seen this happen; however, there have been scattered reports of untoward reactions to these agents."

Dr. Robert Smith: "What do you do about those people whose social background you don't know about for sure, whether they have an adequate diet, etc. Would you give them oral potassium?"

Answer: "You should give potassium salts when prescribing thiazide diuretics, but you've got to give enough; a gram four times a day, at least. The potassium that they would get out of an oral diuretic in combination with potassium would be around 500 mg. per dose. I don't believe this amount is adequate."

Dr. Jennings: "What do they get out of orange juice and bananas?"

Answer: "These are excellent sources of potassium."

Dr. McGehee: "This business of using the Dilantin interests me, as quinidine has become so high priced. It seems to me that we need to get something else to take its place."

Answer: "Dilantin sounds good, but it is not as effective as quinidine. I would say that the most effective use I have found for Dilantin Sodium has been in instances where there has been too much digitalis given or in individuals who have been on an oral diuretic and become potassium depleted, and develop an arrhythmia. Dilantin is quite effective in such instances. Also, there are other problems with Dilantin therapy such as skin rashes, hematologic problems and hypotension. I'd only use it in those instances where I am strongly suspicious of digitalis intoxication and where, for one reason or another, I cannot administer Pronestyl. I administer it slowly intravenously—250 mg. diluted in 5 cc. of water." ★★★

1151 N. State St. (39201)

FLAMING YOUTH

The courteous, well-mannered six year old boy was walking his feminine classmate home from school. As they approached the intersection to cross the street, he said gallantly:

"Here, let me take your hand."

"Okay," she replied, "but I want you to know that you're playing with fire."



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1967, Atlantic City, N. J.; Clinical Convention, Nov. 26-29, 1967, Houston, Texas. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

American Academy of General Practice, Sept. 18-21, 1967, Dallas, Texas. Mr. Mac F. Cahal, Executive Director, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

American College of Surgeons, Annual Congress, Oct. 2-6, 1967, Chicago, Ill. John P. North, Director, 55 E. Erie St., Chicago, Ill. 60611.

Southern Medical Association, Nov. 13-16, 1967, Miami Beach, Fla. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

International College of Surgeons, North American Federation, 32nd Annual Meeting, April 30-May 4, 1967, Bal Harbour, Fla. Mr. Stanley Henwood, Executive Director, 1516 Lakeshore Dr., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi State Medical Association, May 15-18, 1967, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson.

Mississippi Academy of General Practice, Annual Meeting, Oct. 17-19, 1967, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September, and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box L, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.



The President Speaking

'The Last Word: Thanks'

JAMES T. THOMPSON, M.D.

Moss Point, Mississippi

AN OLD PERSIAN PROVERB says that "the cattle grow fatter in the eye of the master," and so it is with state medical association presidents who view their term of office in retrospect. Whatever successes we have attained, whatever accomplishments are ours to claim, and whatever satisfaction we may feel in expanded services belong to the team, because our association is now and must always be a team effort.

The year about to end has been notable for medicine in Mississippi, as it has been to the profession in the United States. We witnessed the coming of Medicare, the enactment of more health legislation by the 89th Congress than in any previous one, and the longest session of our state legislature since 1890. We can say that with medicine, the only constant is the certainty of change.

The art and science of medicine advanced, too, and we opened new horizons in postgraduate medical education, bringing closer to fulfillment the promise of a day when the knowledge explosion can be more easily assimilated. We are the witnesses to an expansion of medical facilities, and we are becoming more realistic about health manpower needs.

As your 1966-67 president, I am grateful to every member for his and her contribution to our association. Especially do I express appreciation to the Trustees, other officers, and the really unsung heroes, the officers of our 17 local societies. May I deliver this message to you personally at Biloxi? ★★



Mopping Up Measles, the Inexcusable Tragedy

I

AN APATHETIC CITIZENRY permitted two million American youngsters to suffer measles in 1966. There were more than 500 deaths from the disease, and many more were left to face life with deafness and residual mental defects. Just how many measles victims experienced secondary diseases is an epidemiological guess. That each case was unnecessary requires no amplification, but the inexcusable tragedy of 500 preventable childhood deaths is a national shame.

It is generally accepted that 90 per cent of the adult population of the United States have had measles. Because of its prevalence, a general apathy to the disease prevails. Perhaps the seemingly unimpressive mortality statistics of one death per 10,000 cases tends to mask the seriousness of the problem, but as far as that individual is concerned, the mortality is 100 per cent.

Unfortunately, almost the same viewpoint must be taken on the 300 cases of tetanus, 164 cases of diphtheria, and 72 cases of poliomyelitis reported last year by the U. S. Public Health Service. Incredibly, these three diseases caused 238 deaths a year as recently as 1964. The whole thing sounds as if it were paraphrased from Mark Twain's immortal observation on the weather: Everybody is talking about immunization, but nobody is doing anything about it.

II

The American medical team is marshalling forces for a massive assault against these easily

preventable diseases through intensive immunization campaigns. The American Medical Association has called on the nation's medical societies to lead the vanguard of the fight in cooperation with public health authorities, voluntary health agencies, educators, local governments, and consumer groups. Everyone is important, and none is without influence. And because this is everybody's concern, it had better be everybody's best effort.

The program is already paying off, for in the highly successful Detroit campaign, more than 171,000 children were immunized against measles. The Pittsburgh push included over 52,000 children, and in little Rhode Island, in excess of 32,000 children were immunized, an astonishing 67 per cent of the measles-susceptible population.

Dr. H. Bruce Dull of the Communicable Disease Center at Atlanta estimates that between 18 and 20 million measles-susceptible children have received the immunization during the past four years when three vaccines have been licensed. He points out that while officially reported cases of measles dropped to 202,000 in 1966 from 458,000 in 1964, only 10 per cent of all cases are actually reported to the U. S. Public Health Service. What is encouraging is that the 1966 total was a 21 year low.

The challenge is substantial, however, because only about 45 per cent of the measles-susceptible group have received the immunization. This leaves six million youngsters still to be protected who will enter kindergarten and grades one and two this year. Still another four million infants will reach their first birthday without having received the immunization.

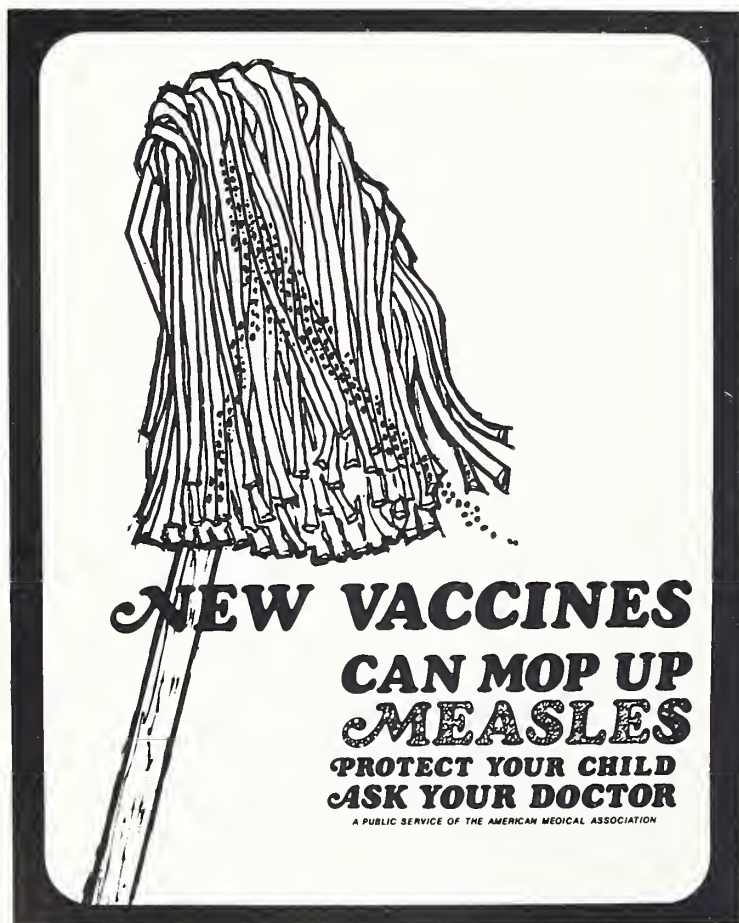
III

In Mississippi, the State Board of Health continues an aggressive campaign for protecting children against measles and other preventable diseases in the overall vaccination program. The Board of Health has asked every school board in the state to make immunization against diphtheria, whooping cough, tetanus, smallpox, polio, and measles a precondition to a child's entering school. Many school boards, the public health authorities report, have issued such an order to become effective with the 1967 fall term.

Another measure taken by the State Board of Health is to provide measles vaccine in elementary schools which are threatened by an outbreak. Sufficient vaccine is made available under this program for children in the first three grades of a school so threatened.

The public health authorities have also initiated an educational program supplementing efforts by county health departments. An information leaflet on measles immunization is mailed to parents with the birth certificate of their child. Posters are available from local public health physicians, and a 15 minute color motion picture film has been released.

In a stroke of public relations genius, the Board of Health got the slogan, "Stop Measles—Vaccinate," on motel sign marquees all over the state.



Drive-in restaurants displayed the appeal, too, in place of hard-sell on the 15 cent hamburger. Radio and television stations are lending an effective voice, as are the newspapers.

IV

AMA's campaign calls for a three-prong attack on preventable disease by:

—Acquainting the public with available immunization services, their values, and at what times in life they should be obtained.

—Encouraging people to seek immunization according to recommended schedules.

—Encouraging physicians to step up efforts to maintain a high level of immunization among their patients.

All of which goes to say that measles ought to be put in the same boat with bubonic plague, yellow fever, and malaria. It will be, too.—R.B.K.

The Ethics of Credit Card Financing

Should a physician accept the use of a patient's bank credit card as a means of paying or financing medical care obligations? With the deluge of bank cards flooding the country and exerting a profound effect upon consumer credit, the choice of whether to honor the cards or not for payment of professional services has raised a serious question in medical ethics. And the question has moved the Judicial Council of the American Medical Association to speak out.

Says the council, "Neither endorsement nor disapproval of the bank card system as a means of financing medical expenses should be given at this time." But the key to the opinion is this: "Physician participation in bank card programs is not unethical in and of itself." So the physician may ethically accept bank cards in the payment of current medical bills in lieu of cash or check.

This opinion is strongly qualified by the Judicial Council. The arbiters of ethics say that the use of the cards must be viewed with reserve at the present state of development in consumer credit. While patients should not be denied the right to determine matters of personal budgeting, physicians must not encourage the use of this financing method if it might compromise the ideals of the medical profession or add to the financial burden of the patient.

The patient's well-being is the primary determinant in the physician's ethical decision. It should be kept in mind, the Judicial Council says, that indiscriminate use of bank cards in financing

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. **PRECAUTIONS:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for pro-

Representative Clinical Results with Synalar*			
Efficacy Documented in over 4,000 Patients			
Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

longed periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. **SIDE EFFECTS:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. *Ann NY Acad Sci* 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. *Proc Soc Exp Biol Med* 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: *Methods of hormone research*, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from

SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

For inflammatory
dermatoses...
by any measure
a topical corticosteroid
of choice

Synalar® (fluocinolone acetonide)

*Milligram for milligram
one of the most active topical
corticosteroids available*

*Rapid and predictable
in antiinflammatory and
antipruritic activity*

*Results often comparable to
those of systemic corticosteroids
with fewer hazards*

larger medical care costs could result in additional cost to patients.

The Judicial Council has laid down three guiding principles to be applied by the component medical society in behalf of its members who participate in bank card programs:

—The local medical society should satisfy itself as to the financial and professional integrity of the plan. It should negotiate with the plan sponsors to insure that service charges to physicians are reasonable. The society should insist that the plan be open to all physicians on the same terms and that it not exploit or capitalize on physician participation. The plan sponsor should be advised that the listing of physicians in directories of participating members is contrary to medical ethics.

—The individual physician may not, because of his participation, increase his fee for medical services rendered the patient. He may not use the plan to solicit patients. He may not even encourage patients to use the bank card plan. His position must be that he accepts the plan, if, indeed, he does as a participant, only as a convenience to patients who desire to use it. Plaques or devices indicating participation in the plan displayed in the physician's office shall be kept "to a discreet and dignified minimum," the council sternly enjoins. Plaques and signs outside the physician's office indicating participation are unacceptable.

—The use of a bank card in connection with the payment of a larger fee—which normally might be paid to the physician under a mutually satisfactory arrangement over a period of time—is not to be encouraged. All members of the American Medical Association are expected to continue the traditional practice of permitting patients of limited means pay relatively large fees over a period of time without interest or carrying charges, the council said. Out of respect for the dignity and traditions of the medical profession, the physician may not relieve himself of his obligations "to render service to humanity, reward or financial gain being a subordinate consideration."

Clearly, the pronouncements of the Judicial Council imply that there may be some fly-by-nighters in the credit card game. But just as clearly, suitable guides are suggested for plans of integrity, such as may be offered by a responsible and soundly-managed bank. And, as in all things involving medical ethics, the issue is one of choice, taste, propriety, judgment, and just dealing, for with physicians, service is the primary goal.—R.B.K.

Respiratory Disease and Socioeconomic Status

Scientists at the University of North Carolina, in partnership with the National Institutes of Health, are investigating the intriguing question as to whether socioeconomic status can and does influence the occurrence of respiratory disease. Under the department of pediatrics in the UNC medical school, a research team is testing these four theories and hypotheses in a study of the occurrence, causes, and prevention of acute respiratory diseases in children of differing educational and economic backgrounds:

—That respiratory syncytial (RS) virus infections occur at an earlier age and are often more serious among children from lower socioeconomic groups.

—That adenoviruses often produce diffuse upper respiratory infections in children under two years old in the middle and upper income groups but do not produce recognizable illness in children from the lower income groups.

—That infections with herpesvirus hominis may produce respiratory illness, recognizing that while the virus is frequently isolated, its role in respiratory disease has not been established.



Copyright 1967, Mississippi State Medical Association

"Another thing we must learn, Miss Fitzheim, is that we never leave bed pans on radiators."

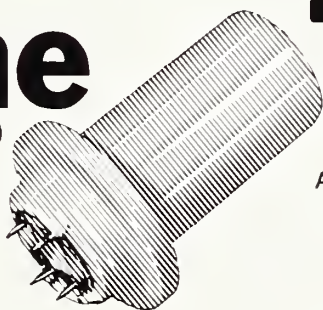
what time is it?

For the past
two years
there's been
one new case
of active tuberculosis
reported for every
four thousand
of U.S. population.

it's time to time.

Tuberculin, Tine Test

(Rosenthal) Lederle



Available in 5's and 25's.
Order now
from your pharmacist
or your Lederle
representative.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

414-6-4046R



—That mycoplasma species other than *M. pneumoniae* may cause acute respiratory illnesses in children.

The method of the investigation is equally interesting as the fascinating hypotheses being tested. Three separate groups of children, each classified according to the education and income of the breadwinner-parent, are being studied simultaneously. The investigative sample in the first group encompasses 800 individuals from 180 households. All are followed as to health needs in the family practice program of the University which has been expanded for the exclusive purpose of the research project.

The second group in the study includes patients drawn from the Day Care Center and Learning Laboratory at UNC. Infants are enrolled at birth and enter the program at six weeks of age. It is anticipated that this sample will total about 240 children by 1968, and they will be followed through the sixth grade.

The third group comprises patients from the private pediatric clinic where three physicians are conducting this phase of the investigation.

The broad aim of the project is to establish more clearly the viruses, bacteria, and mycoplasma most often associated with URI in children and to determine the age and socioeconomic groups in which they occur most frequently. The knowledge gained should be useful in future development of more effective vaccines. It is an imaginative enterprise which many will watch with hope and interest.—R.B.K.

Serving Better the Cause of Justice

Forensic pathology may have moved into a new era of service and prestige with the organization of the National Association of Medical Examiners at New York last month. One of the deans of this respected specialty, Dr. Milton Helpern, chief medical examiner of New York City, is the founder. Time and again, he and his colleagues have proved that dead men do tell tales.

The new association was organized, Dr. Helpern said, at the urging of Richard Childs, chairman of the National Municipal League's executive committee. Mr. Childs has long been a leading advocate of the medical examiner system and a crusader for stronger autopsy laws. But, insists Dr. Helpern, the organization will complement and fill

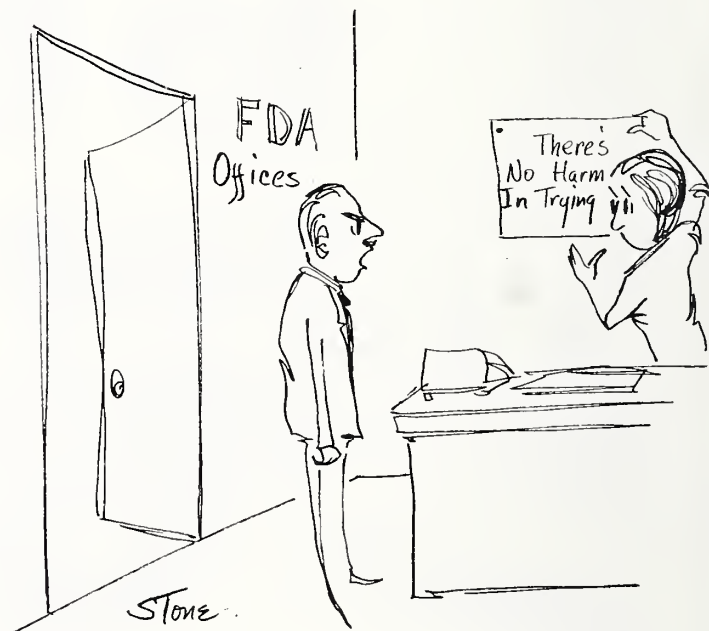
a void rather than compete or attempt to supersede existing organizations with similar interests.

For example, the new association will in no way conflict with the long established American Academy of Forensic Sciences or the National Association of Coroners. While limiting its membership to those with scientific qualifications and attainments, the National Association of Medical Examiners will not concern itself with scientific matters. It will be unique in addressing its efforts to advancing the administrative, career, and practical interests of medical examiners. Concomitantly, it will deal with the problems of the need for understanding and support for the medical examiner system, seek *rapprochement* with appropriate government officials, work actively with the American medical community, and act as a vehicle for the exchange of information and opinion among medical examiners.

The association hopes to establish and operate a central reference library and clearinghouse on medical examiner work. It aims to establish a service available to local and state governments to advise on organizing a medical examiner system.

Associated with Dr. Helpern, who is serving as interim president during the provisional organization period, are familiar and prominent names in forensic pathology. Among them are Coe of Minneapolis, Curphey of Los Angeles, Fisher of Baltimore, Ford of Boston, Henry of Portland, Jachimczyk of Houston, Majoska of Honolulu, Spelman of Philadelphia, and Zawadski of Detroit.

On many occasions, voices among Mississippi



Copyright 1967, Mississippi State Medical Association

"Miss Smith, I'd like a word with you."

Don't let monilia cut broad-spectrum therapy short...

start with **Tetrex-F[®]** tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-

spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

physicians have been raised in support of a medical examiner system for the state. They and others will wish the National Association of Medical Examiners well in their quest to have science better serve the cause of justice.—R.B.K.



PERSONALS

G. B. FLAGG of Gulfport has been elected a director of the Merchants Bank and Trust Company. He is active in yachting circles on the Mississippi Gulf Coast.

RICHARD T. FURR has been named the outstanding young man of the year by the Ocean Springs Junior Chamber of Commerce. He has been a leader in the oral poliomyelitis vaccination program, diabetes detection, and is the founder of the Ocean Springs Scholarship Loan Fund.

C. G. HULL has become associated in practice with JAMES H. SAMS of Hollandale. Dr. Hull is a native of Greenwood. He received his premedical education at Ole Miss and his M.D. degree from the University Medical Center. His postgraduate training was received at UMC and the University of Arkansas.

GUY C. JARRATT of Vicksburg has been named co-chairman of the Easter Seal Society school speech program. The service offers corrective treatment and speech therapy for handicapped children. Dr. Jarratt is from the Department of Pediatrics at the Street Clinic.

GEORGE H. MARTIN of Vicksburg was installed as president of the Alton Ochsner Surgical Society during the recent annual meeting at New Orleans. Active in the state medical association, Dr. Martin is associate editor of the JOURNAL and surgical member of the Committee on Occupational Health.

ANDREW K. MARTINOLICH, JR., of Bay St. Louis has been appointed medical adviser to Hancock County Selective Service Board No. 24. He succeeds FRANK L. SCHMIDT who is now located in practice at Pass Christian.

W. R. MAY of Brookhaven has retired after almost 40 years of service as director of the Lincoln

County Health Department. He was honored at a recent reception by his colleagues. A native of Monroe County, Dr. May attended Ole Miss and received his medical degree from the Tulane University. He received the master's degree in public health from Johns Hopkins University.

JOSEPH B. McMILLON has become associated with FRED D. HILL and JOHN A. McLEOD, III, of Hattiesburg. Limiting their practice to anesthesiology, the group has offices in the Medical Arts Building.

ORRICK METCALFE, JR., of Natchez has been re-elected president of the Adams County Tuberculosis Association for the term 1967-68.

PAUL H. MOORE has been elected president of the Pascagoula Rotary Club. A past president of the Jackson County Cancer Society, he is currently president of the Band Parents Association and the Singing River Chapter of the Fellowship of Christian Athletes.

LAWRENCE B. MORRIS of Macon has been elected to the Board of Directors of the Mississippi Economic Council for a three year term. He will represent MEC Area 9, consisting of the counties of Choctaw, Lowndes, Noxubee, and Oktibbeha. Dr. Morris is currently president of the Prairie Medical Society.

EDSEL F. STEWART of McComb was named "Boss of the Year" by the Dixie Chapter of the National Secretaries Association. The honor is reserved for the business executive or professional person deemed outstanding by the secretaries organization.

FRANK K. TATUM of Tupelo has been appointed director of the Lee County Health Department. In this capacity, Dr. Tatum will also serve Itawamba County.

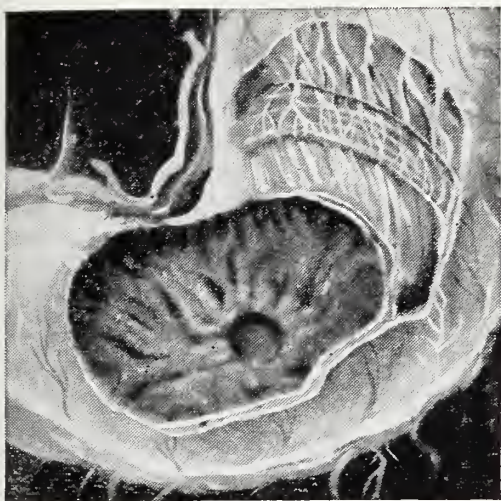
JAMES H. WADDELL has been re-elected president of the Ocean Springs school board. He will serve during the 1967-68 term.



DEATHS

No deaths of Mississippi physicians during March, 1967, were reported to the JOURNAL.

In peptic ulcer... antacid therapy with a new benefit



CONTAINS A BALANCED
COMBINATION
OF THE MOST WIDELY
USED ANTACIDS—
FOR RAPID
NEUTRALIZATION.
PLUS SIMETHICONE—
TO CONTROL
THE FACTOR WHICH
ANTACIDS ALONE
CANNOT INFLUENCE.

Mylanta[®]

- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
- The nonfatiguing flavor and smooth, nongritty consistency of tablets and liquid encourage continued patient cooperation during long-term therapy.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.





NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BURNETT, WILLIAM JOSEPH, Grenada. Born Charleston, Miss., March 27, 1940; M.D., University of Mississippi School of Medicine, Jackson, 1965; interned Baptist Memorial Hospital, Memphis, Tenn., one year; elected March 15, 1967, by North Central District Medical Society.

BURRUS, SWAN BRASFIELD, Tupelo. Born Nashville, Tenn., April 2, 1930; M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1954; interned Vanderbilt University Hospital, Nashville, Tenn., one year; ob-gyn residency, Vanderbilt University Hospital, Nashville, Tenn., three years; ob-gyn fellowship, University of Texas M. D. Anderson Hospital, Houston, one year; member, Southern Medical Association; diplomate of the American Board of Ob-Gyn; elected Sept. 14, 1966, by Northeast Mississippi Medical Society.

COLE, ROBERT J., Amory. Born Hillsdale, Mich., Oct. 7, 1931; M.D., University of Cincinnati College of Medicine, Ohio, 1959; interned Southern Baptist Hospital, New Orleans, La., one year; general surgery residency, Southern Baptist Hospital, New Orleans, La., three years; general surgery preceptorship, V.A. Hospital, Alexandria, La., two years; diplomate of the American Board of Surgery; elected Dec. 13, 1966, by Northeast Mississippi Medical Society.

COPELAND, CLYDE XENOPHON, JR., Jackson. Born Jackson, Miss., Sept. 3, 1935; M.D., Tulane University School of Medicine, New Orleans, 1959; interned University of Mississippi School of Medicine, Jackson, one year; orthopedic residency, The University of Florida Hospital, Gainesville, four years; elected Jan. 3, 1967, by Central Medical Society.

FLOWERS, RICHARD HAROLD, JR., Greenwood. Born Kilmichael, Miss., June 11, 1931; M.D., Tulane University School of Medicine, New Orleans, La., 1956; interned Baptist Memorial Hospital, Memphis, Tenn., one year; dermatology residency, University of Texas Medical Branch, Galveston, three years; fellow, American Acad-

emy of Dermatology; diplomate of the American Board of Dermatology; captain, U. S. Air Force; elected Oct. 12, 1966, by Delta Medical Society.

FULTON, WARREN CARLTON, Aberdeen. Born Philadelphia, Miss., July 15, 1920; M.D., Oklahoma University, Norman, 1955; interned St. Joseph Hospital, Wichita, Kansas, one year; residency, St. Joseph Hospital, Wichita, Kansas, one year; elected Dec. 14, 1966, by Northeast Mississippi Medical Society.

PEEDE, ROBERT LOUIS, Brandon. Born Birmingham, Ala., May 4, 1936; M.D., University of Alabama School of Medicine, Birmingham, 1962; interned Lloyd Noland Hospital, Fairfield, Ala., one year; surgery residency, University of Mississippi School of Medicine, Jackson, one year; surgery residency, Lloyd Noland Hospital, Fairfield, Ala., two years; elected March 7, 1967, by Central Medical Society.

PONTIUS, WILLIAM FREDERIC, Canton. Born Tiffin, Ohio, March 12, 1936; M.D., University of Mississippi School of Medicine, Jackson, 1965; interned Mobile General Hospital, Ala., one year; elected Jan. 3, 1967, by Central Medical Society.

RUSH, LESLIE VAUGHAN, JR., Meridian. Born Meridian, Miss., Sept. 19, 1936; M.D., Tulane University School of Medicine, New Orleans, La., 1961; interned Ochsner Foundation Hospital, New Orleans, La., one year; residency, Ochsner Foundation Hospital, New Orleans, La., four years; elected Jan. 1, 1967, by East Mississippi Medical Society.

SAMS, JAMES HENRY, Hollandale. Born Meridian, Miss., Feb. 9, 1937; M.D., University of Mississippi School of Medicine, Jackson, 1964; interned University of Mississippi School of Medicine, Jackson, one year; general surgery residency, University of Mississippi School of Medicine, Jackson; elected Oct. 12, 1966, by Delta Medical Society.

Dr. Hinsey Is 1967 UMC Commencement Speaker

Dr. Joseph C. Hinsey, director emeritus of the Cornell University Medical Center, will deliver the commencement address when the University of Mississippi School of Medicine conducts its 11th annual graduation exercises. The ceremonies are set for May 28 in the new coliseum at Jackson.

Chancellor J. D. Williams will confer degrees on candidates for the M.D., B.S. (nursing), M.S., and Ph.D. degrees.



POSTGRADUATE CALENDAR

EAST CENTRAL CIRCUIT COURSE

East Mississippi Hospital, Meridian
May 9, 1967, 6:30 p.m.

CARDIAC EMERGENCIES

IN PEDIATRICS, David B. Watson, M.D.

IN ADULTS, Thomas M. Blake, M.D.

IN PEDIATRICS

David B. Watson, M.D.

IN ADULTS

Thomas M. Blake, M.D.

Local Arrangements Chairmen:

Guy T. Vise, M.D., Frank Tucker, M.D.,
Bart Kendrick, M.D.

FUTURE CALENDAR

May 15-18

99TH ANNUAL SESSION, MSMA

September 12

THE THYROID AND RELATED PROBLEMS

September 22

CURRENT PRACTICES IN THE MANAGEMENT
OF BILIARY TRACT PROBLEMS

October 12-14

ARTHRITIS SEMINAR

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRACTICE

October 27

SEMINAR FOR NURSE ANESTHETISTS

November 10

HAND INJURIES

December 8

CARDIOPULMONARY RESUSCITATION

December 14

MODERN MANAGEMENT OF COMMON OBSTETRICAL COMPLICATIONS

January 5, 1968

OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE

January 25, 1968

ALIMENTARY TRACT PROBLEMS

February 1, 1968

UMC DAY

March 27-29, 1968

CARDIOVASCULAR SEMINAR

AMA Will Boost Home Health Services

The American Medical Association has announced a new program to stimulate a "greatly needed increase" in home-care programs and similar home-centered health services in the United States.

Acting on a recommendation of its Board of Trustees, the AMA will convene a planning conference of home-care authorities December 14 at AMA headquarters in Chicago to:

—Reach some agreement on major problems confronting home-centered care programs.

—Establish priorities for future joint action by groups involved in home health care work.

—Establish a planning body to unify and carry forward the work already under way. Organizations invited to send representatives to this conference are the American Hospital Association, American Nurses Association, American Public Health Association, American Public Welfare Association, Health Insurance Association of America, Home Health and Related Services Branch of the U. S. Public Health Service, National Association of Blue Shield Plans, Blue Cross Association, National League for Nursing, and the National Council for Homemaker Services. Several individuals involved in administering various types of home-centered programs also will participate.

"Because of the changing age composition of our population and the proportionate increase in long-term illness, the patient's own home is receiving increased attention as a 'care facility,'" said Charles C. Edwards, M.D., director of the AMA's Division of Socioeconomic Activities.

"The provision of nursing care, physical therapy, homemaker-home health aide services, special diets or other services to patients at home is now generally recognized as an important part of a total care program," said Dr. Edwards.

"Such home-centered care is best for many chronically ill or older patients who do not require institutional care but do need continued supportive services and supervision.

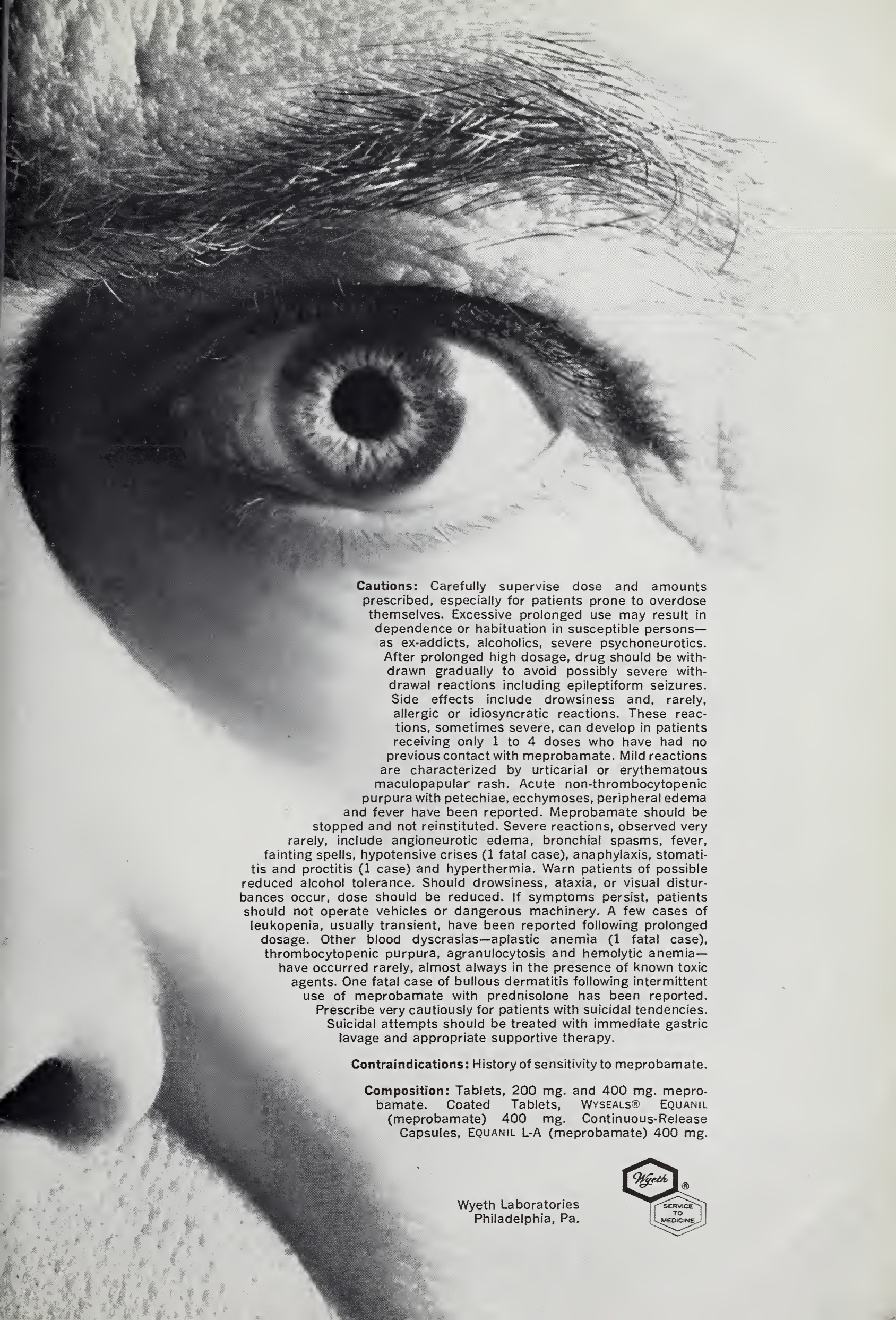
"The patient's recovery is often speeded in the warmth of his home environment," Dr. Edwards said. "His physician can easily order needed supportive services."

The problem with home-centered care, Dr. Edwards said, "is that we seem to be in a situation analogous to Mark Twain's quote about the weather. Why, with so many people talking about the benefits of home care, aren't more people doing something about it in their communities?"



3 a.m.

**Sleep-interfering
anxiety and tension
can usually be relieved
with
EQUANIL[®]
(meprobamate) Wyeth**



Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics.

After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories
Philadelphia, Pa.



ORGANIZATION / Continued

For more than 20 years, numerous national organizations have attempted to stimulate greater development of home-care services, he said.

"Yet, in spite of an abundance of effort on the part of voluntary and public sectors alike, in spite of numerous meetings, exhaustive studies and voluminous literature, the availability of all types of home-centered health services still falls well short of the total need," Dr. Edwards said.

The gap between need and availability is greatest in the comprehensive "coordinated home-care programs," which provide a wide range of physician-directed medical, nursing, social and other supportive services to the patient at home.

"There are about 100 such programs in operation caring for an average total daily census of 7,500 patients," Dr. Edwards said. "But it is estimated that at least 72,000 persons could benefit from services of such a program on any one day.

"In terms of geographic coverage for just one type of service, home nursing, we know that as of January 1, 1966, 55 million persons in the U. S. lived in areas where no home nursing service of any type was available. In addition, we do not know how well home nursing services are meeting the need where they are available," he added.

Dr. Edwards also cited the impact of Public Law 89-97—the Medicare program—in spurring development of home-centered care programs.

Under Medicare, an agency providing home-care services may receive payment for services to persons over 65 if it provides skilled nursing plus at least one other specified service, and meets other conditions.

The Public Health Service provides formula grants and other means to help existing home-care services qualify for participation, and to establish new 'home health agencies' where needed. Almost 2,000 local agencies have been or are in process of being certified as 'home health agencies.'

"Even with this impressive progress, however, one-third of our 65-and-over population still live in areas where no 'home health agency' services are available," Dr. Edwards said.

"We hope that the December 14 planning conference will clearly identify the problems hindering further expansion in all types of home-centered services, and will set the stage for unified action to overcome these problems."

One major problem is the difficulty in serving rural areas. The majority of persons living where home services are unavailable are in areas of 25,000 population or less.

This may be because population density is often not sufficient to support a local home-care agency; yet distance hinders service from a central metropolitan location.

Lack of coordination in metropolitan areas may be another barrier to insuring appropriate home services to those who need it at the time they need it.

State Morbidity Reported Through March 24

The Mississippi State Board of Health reports the following occurrence of morbidity for 1967 through the 12th week of the year, ending March 24. Case totals are shown opposite the disease condition.

Tuberculosis, pul.	138
Tuberculosis, O. F.	14
Salmonella infections	9
Hepatitis, inf.	99
Dysentery, bac.	9
Helminthic infections	
Hookworm	237
Ascariasis	184
Strongyloides	16
Mononucleosis, inf.	15
Septicemia, staph.	1
Meningitis, men.	6
Mumps	181
Measles	474
Chickenpox	106
Influenza	483
Strep infections	
Strep throat	756
Scarlet fever	34
Malaria, vivax	1
Syphilis	
Early	129
Late	33
Gonorrhea	1,232
Rabies in animals	
Bats	2



Book Reviews

Pediatric Therapy 1966-67. Edited by Harry C. Shirkey, M.D., Associate Professor of Pediatrics, Medical College of Alabama. 1223 pages with illustrations. St. Louis: The C. V. Mosby Company, 1966. \$18.50.

The publishers of medical books have lately flooded the market with large and expensive volumes, many of which are based upon voluminous research notes and lectures of the authors. Students are familiar with the type of work that results when didactic classroom lectures are compiled by a department head and his diligent secretary. Frequently these texts are poorly organized and indexed and therefore of little use to the practitioner. The material is not usually based on the author's experience in the pure Oslerian tradition of complete management and observation from the laboratory to the bedside.

The second edition of Shirkey's *Pediatric Therapy*, 1966-1967, naturally emphasizes drug treatment since the editor is distinguished in the field of pharmacology but he constantly insists upon total care based on accurate diagnosis. Just as the best surgeon is one who "will not operate," the decision not to treat is urged by this professor of pharmacology and pediatrics, who is cognizant of the wanted and unwanted qualities of drugs. This edition's organization and index have been greatly improved, and the number of subjects and contributors increased to include all the pediatric subspecialties.

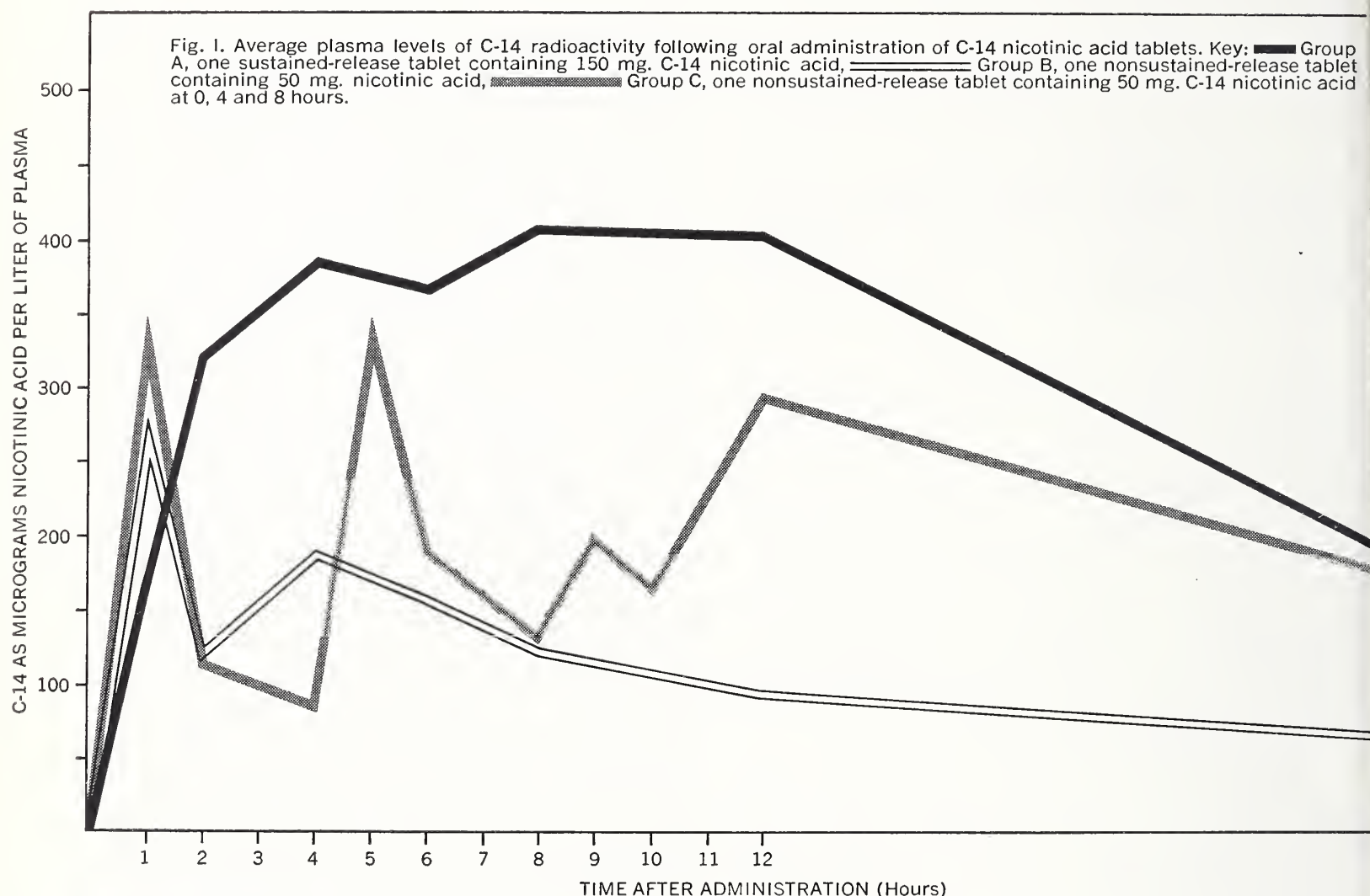
Pediatricians are likely to contrast this work with a competing volume of a similar name by Sydney S. Gellis and Benjamin M. Kagan (also in its second edition this year). Gellis and Kagan's editing tend to provide a confusing variety of viewpoints whereas Shirkey's editing achieves homogeneous if not opinionated agreement of colleagues. Perhaps this is because of Shirkey's choice of contributors from his own background

of medical training and practice, almost one-third of whom have made sizeable contributions to medicine in the South. Many of the contributors are actually colleagues in private practice and engaged in research at the Medical Center, University of Alabama, Birmingham, Alabama. The editing of Gellis and Kagan's large number of 300 contributors compressed into a smaller volume with its smaller drug list makes their volume seem more of a supplement than a reference work, but their gigantic index is more useful than Shirkey's whose topics are sometimes hidden in extensive didactic discussions (e.g. "diabetic mothers, infants of," gets lost in a general discussion of nutritional therapy). This is happily offset by easy location of timely topics such as diet in phenylketonuria and an up-to-the-minute discussion of TRIS buffer by Barger.

It is strongly recommended that Parts I, II and III of Shirkey's book be read through for information on the fundamentals of drug treatment, general therapy (which includes the treatment of constipation in mothers) and symptomatic treatment. These sections are dominated by Shirkey and are full of admonitions tinged with humor and sentiment. (e.g., "the prescription pen is mightier than the sword.") The succeeding chapters are gems from the pens of individual experts in their fields and need not be read in sequence but as the need or interest occurs. An appendix of blue pages denotes the very complete table of drug dosages. An excellent Table of Common Poisons in pink pages allows somewhat awkward access to the "symptoms and treatment," for which the large volume must be rotated 90° and the stiff unphysiological horizontal pages turned upward with the aid of a moistened left thumb, a concession to publishers of heavy medical texts which has always been an aversion of this right-handed reviewer.

Physicians engaged in the treatment of children have struck a bonanza of practically computerized data in these expensive volumes that will necessarily require periodic revision to avoid obsoles-

Sustained circulatory, respiratory and cerebral stimulation for 12 hours



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

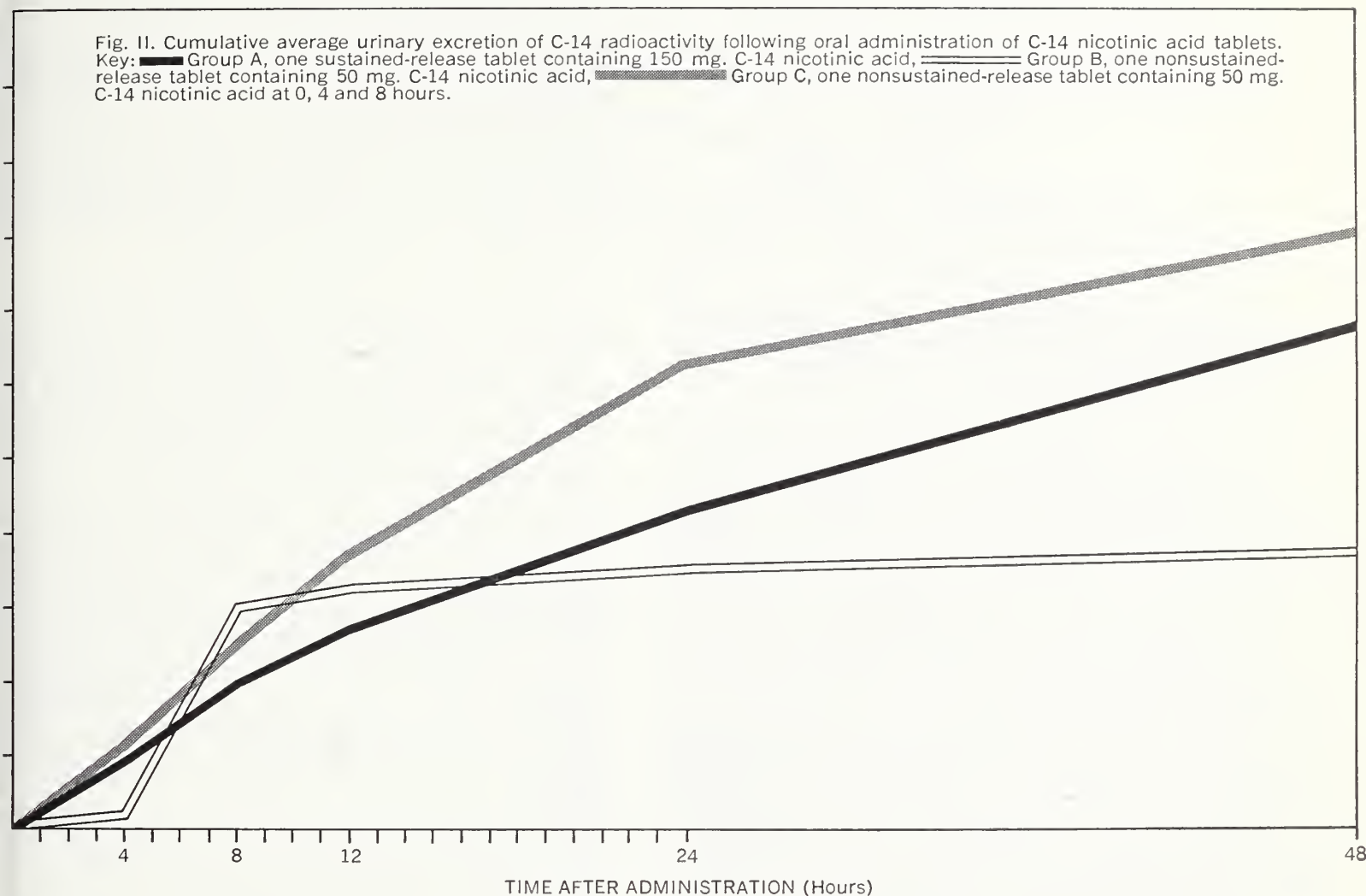
mindedness or senile confusion. Therapy can be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation with a minimum amount (if any) of "flushing." Cerebrovascular circulation is complemented by tylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert.

ed and debilitated

Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, anxiety and irritability are reduced. A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-controlled nicotinic acid/pentylenetetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

"First with the Retro-Steroids"

PHILIPS ROXANE LABORATORIES

Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

cence. Physicians in the South should keep the Shirkey book on the desk and the Gellis volume on the shelf for corroboration. However, it is in no sense regional since the majority of contributors cover the entire United States and part of Canada, the introduction having been written by the editor's former professor of pediatrics, A. Ashley Weech, of the University of Cincinnati College of Medicine under whose scrutiny this volume was compiled. It is dedicated to another great teacher and associate at The Children's Hospital, Cincinnati, Katharine Dodd, M.D.

JO N. ROBINSON, M.D.
Columbus, Miss.

Ocular Therapy—Complications and Management. By Irving H. Leopold, M.D., Chairman, Department of Ophthalmology, Mount Sinai School of Medicine, New York, New York. 157 pages with illustrations. St. Louis: The C. V. Mosby Company, 1966. Price: \$11.00.

Ocular Therapy is a collection of articles presented at two symposia, the first in San Francisco at the Association for Research in Ophthalmology in June 1964, and the second, from the American Academy of Ophthalmology and Otolaryngology in Chicago in November 1965. As Dr. Leopold indicates, the text is not exhaustive but rather a presentation of current information on drug therapy with particular reference to the effect on the human eye.

The chapter on antibiotic use in ophthalmology is most praiseworthy, with an excellent compilation of the newer, as well as older, antibiotics available. Stress is placed on the well known ophthalmological fact of deficient intraocular penetration of most of the antibiotics and the relatively higher dosage schedules which must be employed. Opportunistic ocular infections are lucidly discussed in a further chapter with emphasis on indicated and contraindicated drug therapy.

Ocular Therapy is recommended for ophthalmologists, ophthalmology residents, and other physicians pharmacologically oriented.

JOHN J. WHITE, M.D.

Medicine of Arctic Will Be Studied

Problems of medicine and public health in the Arctic will be explored July 23-28 at an international scientific symposium in Alaska supported

by a grant from the Public Health Service's National Institute of Allergy and Infectious Diseases.

The Arctic Institute of North America, headquarters of which are in Washington, D. C., and the University of Alaska will conduct a 5-day "Symposium on Circumpolar Health-Related Problems" at the university, near Fairbanks. Interested scientists from circumpolar countries will be invited to take part in the sessions.

Dr. William H. Stewart, Surgeon General of the Public Health Service, announced today the award of a \$38,300 grant from the NIAID to help finance the meeting, which will define the most pressing health problems of the Arctic, explore the impact of scientific and technological developments and of the region's expected population growth on the health of its inhabitants, and lay the groundwork for future international cooperation in research on Arctic health problems.

Dr. C. E. Albrecht of the department of preventive medicine, Jefferson Medical College, Philadelphia, Pa., is chairman of the symposium steering committee. Dr. Albrecht is a member of the Arctic Institute's board of governors, and from 1945 to 1956 was commissioner of health for the Territory of Alaska.

The NIAID, which has long conducted research in its own laboratories on viral, parasitic, and rickettsial diseases of the Arctic, is supporting the symposium in part because the relatively small number of scientists working in circumpolar medicine must be informed on a broad range of health problems. Also, arctic medicine is expected to become a matter of greater general concern than in the past, when its significance was primarily military.

Because of the unique polar environment, the effects of disease and its attendant problems are not the same in the arctic regions as in temperate climates. Similarly, the impact of the Arctic environment on social and individual mental states is considered important, but has not been scientifically defined.

The Arctic provides unusually favorable conditions for comparative investigations of genetic factors in disease, the transmission of infection, the effect of artificial immunization, the influence of cultural differences, and nutritional factors in health and illness.

Scientists will be invited to present papers at the symposium on Arctic health problems as they relate to pulmonary diseases, virus diseases, zoonoses (animal diseases that may be transmitted to man), environmental stresses on human behavior, physiology, anthropology, nutrition, and current and potentially hazardous contamination of the environment.

Mediatic[®]

Designed for the “metabolically spent”

Nutritional reinforcement for those who can't
-or won't—eat properly...balanced amounts of
estrogen and androgen to counteract declining
gonadal hormone secretion and its sequelae of
premature degenerative changes...mild
antidepressant for a gentle “mood” uplift...

The estrogen component in MEDIATRIC is
REMARIN[®] (conjugated estrogens—equine),
the natural estrogen most widely prescribed for its
superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation*. It contributes a gentle “mood” uplift
through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and
Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

conjugated estrogens—equine (Premarin [®])	0.25 mg.
methylestosterone	2.5 mg.
thiamine HCl	5.0 mg.
cyanocobalamin	1.5 mcg.
methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

conjugated estrogens—equine (Premarin [®])	0.25 mg.
methylestosterone	2.5 mg.
ascorbic acid	100.0 mg.
cyanocobalamin	2.5 mcg.
intrinsic factor concentrate	8.0 mg.
thiamine mononitrate	10.0 mg.
riboflavin	5.0 mg.
niacinamide	50.0 mg.
pyridoxine HCl	3.0 mg.
calc. pantothenate	20.0 mg.
ferrous sulfate exsic.	30.0 mg.
methamphetamine HCl	1.0 mg.

orally active, water-soluble conjugated estrogens derived from
pregnant mares' urine and standardized in terms of the weight
of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active;
helps relieve general malaise, easy fatigability, vague pains in
the bones and joints, loss of appetite, and lack of interest
usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyl-
testosterone component.

WARNING: Some patients with pernicious anemia may not
respond to treatment with the Tablets or Capsules, nor is
cessation of response predictable. Periodic examinations and
laboratory studies of pernicious anemia patients are essential
and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast ten-
derness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of
Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and
uterus, cyclic therapy is recommended (3 week regimen with
1 week rest period—Withdrawal bleeding may occur during
this 1 week rest period).

In the male: A careful check should be made on the status
of the prostate gland when therapy is given for protracted
intervals.

SUPPLIED: No. 910 — MEDIATRIC Liquid, in bottles of 16
fluidounces and 1 gallon. No. 752 — MEDIATRIC Tablets,
in bottles of 100 and 1,000. No. 252 — MEDIATRIC Cap-
sules, in bottles of 30, 100, and 1,000.



Mediatic[®]
steroid-nutritional compound



AYERST LABORATORIES, NEW YORK, N. Y. 10017 • Montreal, Canada



TRUSTEES, COUNCILS, AND COMMITTEES

■ BOARD OF TRUSTEES

JOHN B. HOWELL, JR., Canton, Chairman (1968)
LAMAR ARRINGTON, Meridian, Vice Chairman (1968)
C. D. TAYLOR, JR., Pass Christian, Secretary (1969)
LYNE S. GAMBLE, Greenville (1967)
JOSEPH B. ROGERS, Oxford (1967)
J. T. DAVIS, Corinth (1967)
MAL S. RIDDELL, JR., Winona (1968)
W. E. MOAK, Richton (1969)
G. SWINK HICKS, Natchez (1969)

■ COUNCIL ON BUDGET AND FINANCE

J. T. DAVIS, Corinth, Chairman (1968)
DANIEL L. HOLLIS, Biloxi (1967)
GEORGE D. PURVIS, Jackson (1969)

■ EDITORIAL COUNCIL

W. MONCURE DABNEY, Crystal Springs, Editor (1969)
GEORGE H. MARTIN, Vicksburg, Associate Editor (1968)
THOMAS W. WESSON, Tupelo, Associate Editor (1967)

■ COUNCIL ON MEDICAL EDUCATION

E. LEROY WILKINS, Clarksdale, Chairman (1967)
W. O. BARNETT, Jackson (1968)
DENNIS E. WARD, Corinth (1969)

■ COUNCIL ON CONSTITUTION AND BY-LAWS

E. LEROY WILKINS, Clarksdale, Chairman (1969)
JOHN B. HOWELL, JR., Canton (1967)
RAYMOND S. MARTIN, Jackson (1968)

■ COUNCIL ON LEGISLATION

W. E. LOTTERHOS, Jackson, Chairman (1967)
JOHN G. EGGER, Drew (1968)
JAMES O. GILMORE, Oxford (1968)
FRANK M. DAVIS, Corinth (1968)
PAUL B. BRUMBY, Lexington (1967)
LAMAR ARRINGTON, Meridian (1967)
A. T. TATUM, Petal (1969)
A. V. BEACHAM, Magnolia (1969)
ELDON L. BOLTON, Biloxi (1969)

■ JUDICIAL COUNCIL

E. LEROY WILKINS, Clarksdale, Chairman (1968)
R. L. WYATT, Holly Springs (1968)
THOMAS N. BRADDOCK, JR., West Point (1968)
PAUL B. BRUMBY, Lexington (1969)
WILLIAM B. WIENER, Jackson (1969)
OMAR SIMMONS, Newton (1969)
A. T. TATUM, Petal (1967)
G. SWINK HICKS, Natchez (1967)
W. J. WEATHERFORD, Pascagoula (1967)

■ COUNCIL ON MEDICAL SERVICE

GUY T. VISE, Meridian, Chairman (1968)
GEORGE F. ARCHER, Greenville (1969)
JAMES O. GILMORE, Oxford (1969)
JACK M. SENTER, Belmont (1969)
PAUL B. BRUMBY, Lexington (1968)
JOHN G. CADEN, JR., Jackson (1968)
T. E. ROSS, Hattiesburg (1967)
R. J. FIELD, JR., Centreville (1967)
WESLEY L. MCFARLAND, Bay St. Louis (1967)

■ COUNCIL ON SCIENTIFIC ASSEMBLY

JAMES L. ROYALS, Jackson, Chairman
SETH H. BARRON, Columbia, EENT
PAUL B. BRUMBY, Lexington, GP
WILLIAM E. WEEMS, Laurel, Medicine
CHESTER H. LAKE, Jackson, Ob-Gyn
J. LEE OWEN, Jackson, Pediatrics
SHELBY W. MITCHELL, Ellisville, Preventive Medicine
GEORGE E. GILLESPIE, Jackson, Surgery



Uniform, Ethical M.D. Telephone Listing Guides Are Published by Judicial Council

Guides for physicians' listings in telephone directories have been issued by the Judicial Council of the American Medical Association. The uniform, ethical ground rules preserve the public's right to know the names, types of practice, office locations and hours, and telephone numbers of M.D.'s.

Copies of the guides have been distributed to state and local medical societies throughout the United States, according to Judicial Council spokesmen. A limited supply of the publication is available to AMA members on individual request, the announcement added.

Although the guides are specific, the council said that "the county (component) medical society, in the last analysis, must ascertain local community need and through a well thought out program serve those needs.

"It is incumbent on the county medical society to implement these guidelines for the local medical community," the council continued. "With an established program, the county medical society can meet with representatives of the telephone company and develop an acceptable program of public service," the council said.

In an eight-point series of guides, the Judicial Council makes the initial point of physicians' listings making use of the abbreviation "M.D." rather than "Dr." The council rules the latter out as being misleading.

Use of the abbreviation "phys." for "physician" is also taboo, the guides say, because it can also refer to an osteopath.

The second area in the guides concerns description of the type of practice. While such descrip-

tion is fully acceptable, only those specialties and subspecialties recognized by AMA and the Advisory Board for Medical Specialties may be employed. The council said that "Only those physicians who are board certified or who limit their practice exclusively to a specialty should list themselves in the designated field."

Specialty listings may not include more than two specialties per physician, the council added. Pointing out the undesirability of multiple specialty listings, the guides say that they are both a form of self-aggrandizement and a source of confusion to the public.

The size and face of type in classified (yellow pages) section should be uniform, the guides declare. In examples, no bold face type is shown, and most local medical societies are known to have banned it. Box and display advertisements for individual physicians or groups "are not in keeping with the dignity of the medical profession," the guides point out.

Telephone listings in the directory of a locality where a physician has no office, residence, or hospital affiliation are also proscribed, except for major metropolitan areas where growth has brought about geographic divisions.

Answering service numbers or "if no answer" insertions are permissible for the convenience of patients. Display ads by county medical societies showing addresses and special emergency services were described as "commendable."

AMA headquarters at Chicago said that copies of the guides have been furnished to the American Telephone and Telegraph Co. for further distribution to all telephone companies.

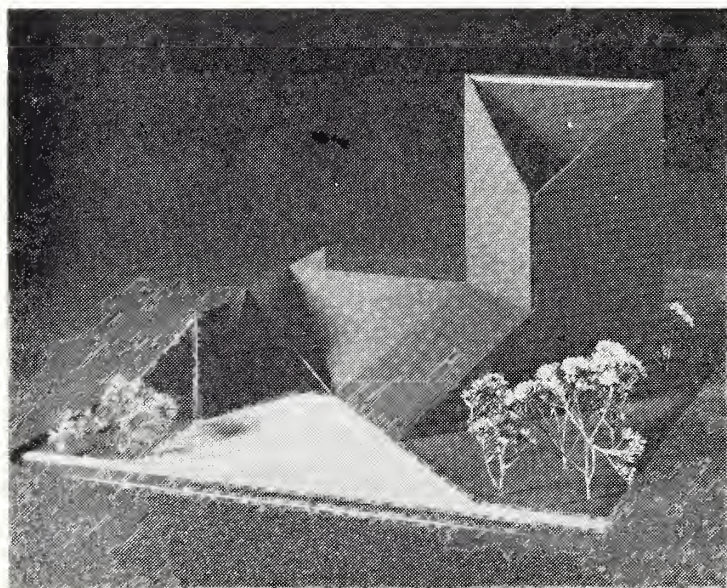
UT Will Construct Interfaith Center

A team of some 180 Memphis men has launched a campaign to build an Interfaith Center for University of Tennessee Medical Units students, faculty and administrative personnel in Memphis.

Under the leadership of R. A. Trippeer, Jr., Memphis businessman who serves as president of the University Interfaith Association and campaign chairman, the group has mapped plans to complete raising of funds for the building by April 15. Their goal is \$300,000.

Already, five religious groups supporting the program, have given or pledged \$115,000 to the \$415,000 project. The groups are Methodist, Presbyterian, Episcopalian, Jewish and Catholic, all of whom now have chaplains assigned to the campus.

The Interfaith Center is a new concept for meeting the religious needs of U. T. medical school personnel.



This is the architect's sculptural idea for the proposed \$415,000 Interfaith Center for University of Tennessee Medical Units students, faculty and administrative personnel in Memphis, Tenn.

Co-chairmen of six volunteer campaign groups are: Wallace H. Mayton, Jr., and B. H. Garner; Walter A. Barret and Murray Reiter; Walker Wellford, III and W. J. Michael Cody; Dr. Howard A. Boone and Dr. John Nash; Dr. Robert F. Taylor and Dr. H. Vernon Reed; and, Dr. John L. Wood and Dr. Sidney A. Cohn.

VALIUM[®] (diazepam)Roche[®]

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. **Geriatric patients:** 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions)

Supplied: Valium[®] (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.



Roche Laboratories
Division of
Hoffmann-LaRoche Inc.
Nutley, N.J. 07110

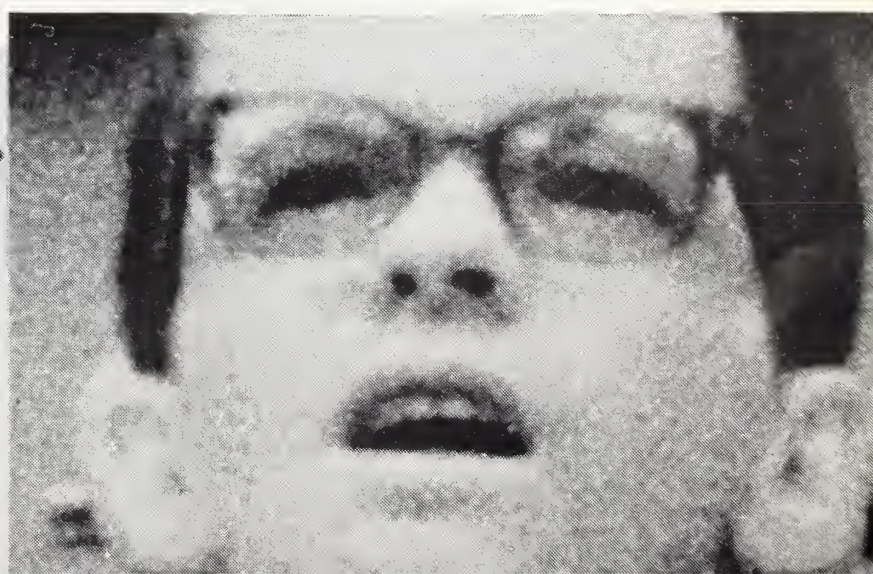


IMPORTANT NEW INSIGHTS INTO HUMAN RESPONSE TO EMOTIONAL STRESS:

Impressive new confirmation of the effectiveness of
Valium® (diazepam)

...our Roche representative to arrange a
demonstration of this important and fascinating
technique of research in emotional stress
using new methodology...quantitative, objective
measurement with double-blind controls.

*See opposite page for important
demonstrating information.*



Hemodialysis Unit Is Opened at UMC

The first artificial kidney unit in the state has been opened at the University of Mississippi Medical Center.

A near half-million-dollar Public Health Service grant to Dr. John D. Bower, instructor in medicine, built and will operate the seven-bed unit for the first three years. Primary purpose of the artificial kidney is to provide periodic hemodialysis for chronic uremia patients, but the unit will also be used to treat acute renal failure and certain toxicology problems.

The new unit has the Kiil kidney and a master dialysate tank capable of reconstituting and supplying dialysate for simultaneous treatment of up to 20 patients. Patient care facilities include a six-bed area for chronic dialysis and a separate one-bed isolation unit for acute treatment. Supportive facilities comprise an integral part of the 3,000 square foot complex located on the ground floor.

Experience has demonstrated that patients between the ages of 15 and 50 generally respond best to the chronic care program, but exceptions may be made if prognosis is otherwise favorable.

Physicians who want to submit their patients' names for consideration in the chronic dialysis program should make their requests, preferably in writing, to Dr. Bower, director of the unit. Final decisions rest with a committee.

Patients are expected to pay up to a maximum limit for their own care, especially for laboratory work, blood transfusions, x-rays, hospitalization and medication.

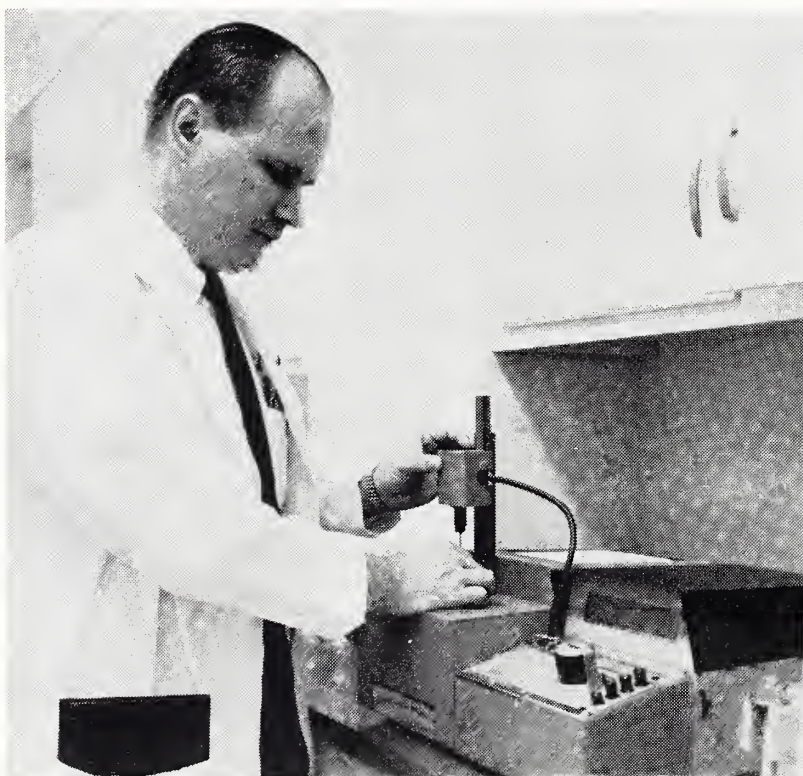
SBH Initiates New Disaster Service

Preparedness for providing health care in the case of disaster in Mississippi has been strengthened, according to Dr. A. L. Gray.

The state health officer said the State Board of Health has signed a contract with the Public Health Service that will redirect the Emergency Medical Stockpile Program closer to community hospitals.

The terms of the contract call for packaged disaster hospitals to be affiliated with cooperating hospitals which will provide the necessary planning and professional staff for the proper utilization of the PDH's in time of a disaster.

Selected hospitals agreeing to affiliate with a packaged disaster hospital will rotate currently



Dr. John D. Bower, instructor in medicine and director of the chronic hemodialysis unit, conducts clinical studies in the laboratory adjacent to the patient care area. Right, Mrs. Charles A. Garrett, Jr.,



of Jackson receives her twice-weekly care in a 12-hour dialysis period. Six patients may be cared for simultaneously.

dated pharmaceuticals in a PDH with their regular stocks.

In addition, a 30-day supply of essential medical items for disaster care will be furnished the hospitals, thereby augmenting their normal disaster capability.

"These items—known officially as Hospital Reserve Disaster Inventory—assure maximum flexibility in making health resources available at points of greatest need as quickly as possible," Dr. Gray said.

He explained that the back-up supplies will enable hospitals to provide casualty care in a natural or accidental disaster or following an enemy attack when normal inventories could be depleted and resupply lines disrupted for weeks.

Initially nine hospitals in Mississippi are eligible to receive packaged disaster hospital units. As time goes on, the number will be increased to 37, according to the new contract.

Dr. Gray said that the State Board of Health will assist individual hospitals to develop training programs centered around the utilization of the PDH, along with the development of expanded hospital disaster plans.

Mississippi's new contract follows a 2-year study of the National Emergency Medical Stockpile Program by the Health Mobilization Division of Public Health Service.

MS Society Holds Annual Meet, Elects

E. Reber McKay of Jackson was elected president of the Central Mississippi Chapter of Multiple Sclerosis at the recent 1967 annual meeting. Other officers elected include Lee M. Lipscomb, Jr., vice-president, Mrs. Dorothy Woods, secretary, and Mrs. Ruth Armstrong, treasurer, all of Jackson.

W. J. Hauserman, Jr., of Vicksburg was awarded the Bronze Hope Chest for volunteer service as the one who had done the most to advance the program of the chapter. This national award made to the top chapter volunteer is the "Oscar" for dedication to ultimate victory over multiple sclerosis. Hauserman has served as a board member since the chapter was organized two years ago.

A medical textbook entitled "Multiple Sclerosis" was given to the University of Mississippi Medical Library.

Committee reports indicated that the chapter's efforts in the area of patient service are beginning

to be felt. A loan closet is being set up, talking book machines have been secured for patients and other services are planned.

In attendance at the meeting were Dale W. Griffith, regional director, and Ron Patterson, field representative, Southeast Regional Office, National Multiple Sclerosis Society, Atlanta, Georgia.

Board members elected at the meeting include: Thomas J. Mallett, Richard Whitehurst, George T. Sheffield, and Sister Raphael Marie.

Glue-Sniffing Said Escape from Reality

Sniffing such products as glues, paint thinner, fingernail polish remover, cleaning and lighter fluid, although not the fad of recent years, has become a permanent and relatively common form of abnormal childhood behavior, which can lead to accidents, violence, and antisocial acts.

So conclude Drs. Edward Press, Illinois Department of Public Health, and Alan K. Done, Department of Pediatrics, University of Utah College of Medicine, in *Pediatrics*, official publication of the American Academy of Pediatrics.

"Various observations of the problem," the authors point out, "suggest that sniffing provides a chemical escape from reality which is more adaptable, and therefore more readily accepted, by young children than are such other intoxicating practices as alcohol ingestion or the use of narcotic drugs."

The article points to the relative inexpensiveness, ease of concealment, and ease of procurement "for supposedly legitimate purposes," as explainable reasons for the popularity of solvent sniffing among youngsters today.

"The result is the development of dependence or habituation of youngsters at a far younger age than would otherwise be likely."

Dr. Done and Dr. Press indicate in their paper that solvent sniffing may be the counterpart in the young child "of the abuse of narcotics, alcohol, or LSD in older individuals."

Enumerating results of studies conducted to characterize solvent sniffers, and to assess the importance, potential dangers, and effectiveness of various control measures, the article indicates that most solvent sniffers are in their early teens. Many more boys than girls become addicted to the practice.

Studies also reveal that sniffers usually have prior histories of scholastic underachievement, but

ORGANIZATION / Continued

that "intelligence per se bore little positive relation to the adoption of the habit."

Further indicated is "a definite relationship to other modes of delinquency, of which most sniffers had long records."

Emotional deprivation seems to be the chief psychosocial factor which may contribute to the habit.

As how best to overcome solvent addiction, the authors recommend "individual and family treatment aimed at the underlying disorder."

They indicate that supportive psychotherapy individualized to treat problems existing in the psychological make-up of the individual or in his environment has proven successful.

New UT Med School Planned for Knoxville

The Board of Trustees of the University of Tennessee has acted to authorize the administration to seek funds with which to initiate planning for a new medical school to be located at Knoxville.

The announcement said that three considerations were of importance in the board's arriving at its decision on the proposed Knoxville institution. First is the need to produce more well-trained physicians, both nationally and for Tennessee, the board stated.

A second consideration relates to the obligation of the state to offer broad range educational facilities through an institution of state-wide interests. Third, the announcement continued, the present UT College of Medicine cannot be significantly expanded without endangering the quality of its curricula and accreditation status.

Currently, about 1.7 per cent of Tennessee students receiving their first or baccalaureate degrees in Tennessee colleges and universities enter medical school in the state. This is in contrast to a national mean of 2 per cent, pointing up the need, the university board said, for the second state-supported medical school.

In 1951, action was initiated to increase the number of first year medical students accepted at UT by 60 per cent, when beginning classes were upped to 200 from 140.

Tentative plans call for the university to secure planning funds for the new Knoxville medical

school during the 1967 regular session of the legislature and to complete the planning phase by 1969. Under this schedule, construction funds would be sought during the 1969-70 biennium with actual building beginning by 1971.

The announcement said that the main UT medical campus would continue to be at Memphis, and the new Knoxville facility would be considered as a branch rather than as a competitive institution.

Rx Drug Prices Continue Decline

New evidence of declining prescription drug prices was disclosed by the U. S. Department of Labor.

Its consumer price index for prescriptions reached a new average low of 90.6 for 1966, 9 per cent below the 1957-59 base period.

In the last three months of the year, the drug index dropped to 90.3, down two-tenths of a point from the previous three months.

The Labor Department's Bureau of Labor Statistics attributed the latest decline to price reductions for anti-infective, tranquilizing and anti-arthritic medications.

C. Joseph Stetler, president of the Pharmaceutical Manufacturers Association, commented:

"The trend of prescription drug prices is definitely down. And it is down during inflation of most other price levels.

"This means savings for patients and their families. If drug prices had followed the course of the government's 'all-item' index, the cost of drugs bought in 1966 would have been nearly 25 per cent higher."

Blue Shield Has New National Headquarters

The National Association of Blue Shield Plans has occupied new quarters in the ultra-new 211 E. Chicago Ave. building at Chicago. John W. Castellucci, executive vice president of the Blue plan association, said that the organization has 20,000 square feet of space on two floors.

NABSP is a national organization which represents the 74 U. S. Blue Shield plans. It was organized initially in 1945 by AMA.



Tareyton...with the taste worth fighting for

America's largest-selling charcoal-tip cigarette

©The American Tobacco Company

State's New HIBAC Meets at Jackson

NSPB Offers New Research Grants

W. P. Woolley, president of Mississippi Society for the Prevention of Blindness announced that the Committee on Basic and Clinical Research of the National Society for the Prevention of Blindness of New York City is accepting applications for grants for scientific study which will contribute to the basic understanding of eye function and pathology and improve methods of diagnosis, treatment, and methods for the prevention of blinding eye diseases.

Grants not exceeding \$5,000 will be made for a one-year period for projects not being financed by other sources.

Any physician interested in obtaining information regarding the grants should write to the National Society for the Prevention of Blindness, 5th Floor, 79 Madison Avenue, New York, N. Y. 10016.



Key figures in the administration of Medicare met at the MSMA building recently as guests of the association's new Health Insurance Benefits Advisory Committee. Top leaders are, from the left, W. C. Moseley of Jackson, vice president of Blue Cross; Reyna E. Williamson of Atlanta, assistant regional HEW representative; Dr. James T. Thompson, MSMA president; Warren G. Fouraker of Jackson, head of the Travelers Medicare operation in the state; and Dr. Mal S. Riddell, Jr., of Winona, committee chairman and MSMA Trustee.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 595-1151

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialities.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL;

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

Wyeth Offers Coral Venom Antidote

An antidote for the poison from bites by coral snakes will be supplied soon as a public service by Wyeth Laboratories, Philadelphia pharmaceutical manufacturer.

H. F. AuBuchon, vice president and director of marketing for Wyeth, announced that the Company will supply in May Antivenin: *Micrurus fulvius*, the first Antivenin specific for the treatment of bites by the Eastern Coral Snake (*Micrurus Fulvius*), the major species of this genus.

The new Antivenin will be distributed by Wyeth to state health departments in areas where the eastern coral snake is found. Also a supply of the Antivenin will be available through Wyeth biological facility at Marietta, Pa. Distribution will be on a no charge basis.

Wyeth is the sole producer of the Antivenin for another snake poison—Antivenin: *Crotalidae* polyvalent, antiserum for pit vipers such as rattlesnakes.

Antivenin: *Micrurus fulvius* will be the first coral snake antivenin to be manufactured in the

United States, and is released with the approval of the Division of Biological Standards of the United Public Health Service.

Dr. Frazier Is 50 Year Club Inductee

Dr. Thomas W. Frazier of Crawford became the newest inductee in the Fifty Year Club during the regular meeting of the Prairie Medical Society at Macon. The scroll and lapel pin were presented on behalf of the state medical association and sponsoring society by Dr. Arthur E. Brown of Columbus, vice president of MSMA.

The honoree was graduated from the St. Louis University School of Medicine in 1916. He has been a resident and active practitioner in the Lowndes County community for more than 45 years and is a charter member of the Prairie society.

The Fifty Year Club, a special honor group of those in medicine for half a century or more, is sponsored by the state association's Board of Trustees.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

Legal Study Made of Anesthesia

A special study of court decisions relating to physician or hospital liability arising out of the administration of anesthesia has been prepared and published by the American Medical Association's Law Department. The book, "Cases on Anesthesia," is available to members without charge upon request.

The work covers such medical problems as contraindications, allergic reactions, intubation, explosions, burns, and extravasation. Legal topics relevant to the field include consent, vicarious liability, and statutes of limitations. AMA members desiring a copy should write to the Department of Legal Research at AMA headquarters.

S.S. Hope Sails for Colombia Mission

One hundred four doctors, nurses and technologists sailed aboard the hospital ship *S.S. Hope* from Philadelphia to begin a 10-month medical teaching-treatment mission in Colombia.

The Hope team, representing 25 states and two foreign countries, will arrive in the port city of Cartagena where they will work with their Colombian medical colleagues aboard the ship and in hospital facilities ashore.

Gala farewell ceremonies for the world's first peacetime hospital ship were held in both Philadelphia and Miami. Both cities hosted reception honoring the Hope medical staff, all of whom serve as volunteers or for token salaries.

Somebody . . .

will get the last room at the Buena Vista for the
99th Annual Session at Biloxi.

Wouldn't . . .

it be just as well if it were you?



Mississippi State Medical
Association, 99th Annual
Session, May 15-18, 1967

Volume VIII
Number 6
June 1967



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
TEMPLE AINSWORTH, M.D.
President
JOSEPH B. ROGERS, M.D.
President-elect
WALTER H. SIMMONS, M.D.
Secretary-Treasurer
WILLIAM E. LOTTERHOS, M.D.
Speaker
JAMES L. ROYALS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

CONTENTS

ORIGINAL PAPERS

- Advances in
Antibiotic Therapy **341** Fred Allison, Jr., M.D.
- Rheumatoid Ar-
thritis: Pathogenesis
and Differential
Diagnosis **350** Louis Schiesari, M.D.
- Treatment of
Infertility in the
Female **354** William B. Wiener, M.D.

SPECIAL ARTICLES

- Radiologic
Seminar LXII
Clinicopathological **357** Carl R. Hale, M.D.
- Conference
LXXVIII **360** University Medical Center

EDITORIALS

- The Vanishing
American's State
of Health **367** The Pitiable Red Man
- Gather Round,
You Rounders **372** 100,000 Old Boxcars
- Price-fixed, Generic
Drugs for Medicare **372** Absolutely Not!
- Cool It, Man **374** Beatniks and Four-letter Words

THIS MONTH

- The President
Speaking **366** The Benefit of Our Concerns
- The Literature **381** New Books Reviewed
- Medical
Organization **383** The Big 99th

Copyright 1967, Mississippi State Medical Association

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

*The
fast-disintegrating
uncoated tablet
gives relief in
15 minutes*

Each tablet contains:

Potassium Iodide.....	195 mg.
Aminophylline.....	130 mg.
Phenobarbital, Caution: May be habit forming...	21 mg.
Ephedrine HCl.....	16 mg.

FEDERAL LAW PROHIBITS

DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.

RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



AMA President Hits Medicare Problems

The American Medical Association has offered to meet with the House Ways and Means Committee and other interested parties to hammer out a workable approach to solving the many complex problems in the Medicare program.

Dr. Charles L. Hudson, president of AMA, told the committee that Medicare has two major defects which make it extremely costly and difficult to administer:

It covers millions of people who can afford to finance their own health care; and

It centralizes direction of the program in Washington rather than permitting the flexibility and trial-and-error of health care programs administered by the states.

"Available tax funds should be used to give maximum health care to those who need help," Dr. Hudson said. "Expenditure of public funds on those who do not need help limits the resources available to those who do need it.

"Unless changes are made in the present program, the end result can only be lower quality health care at higher prices," he said.

The Cleveland, Ohio, physician urged the committee not to expand Medicare.

"Further expansion of the program with its present deficiencies will only lead to more administrative problems, more pressures on medical facilities and personnel, higher taxes on workers and employers and increased medical care costs for the entire population," Dr. Hudson warned.

The AMA spokesman said Title XIX offers a better principle for providing government-financed health care.

"A properly administered Title XIX program, with realistic criteria of eligibility designed for economically disadvantaged persons, is sound because it helps those who need help, is state administered and therefore can be tailored to meet the needs of the people residing in the state," he said.

"The present Medicare requirement that a patient pay his physician's bill before seeking reimbursement from the government is proving a hardship on certain patients," Dr. Hudson said.

The AMA also recommended that the Congress remove the requirement in the Medicare program for three days of hospitalization before a patient can qualify for extended care benefits, such as those provided in a nursing home.

Dr. Hudson said "many patients who need extended care do not need the more intensive and more expensive care available in a hospital."

Another recommendation was that treatment of the mentally ill under Medicare be on a basis equal to that provided for other Medicare patients.

AMA urged that Congress not extend Medicare benefits to persons below age 65 and that the Title XIX program be utilized for caring for the disabled who need help.

Dr. Hudson suggested to the committee that there be a complete restructuring of the Medicare provision of professional medical services by converting Part 1-B into a voluntary insurance program.

"Much dissatisfaction exists with the present operation of Part 1-B," he said.

"Carriers are dissatisfied because of administrative problems;

"Physicians are dissatisfied because the federal government has involved itself in the practice of medicine through rules, regulations and statistical data requirements;

"The patient is dissatisfied because he finds he is getting less than he expected, he experiences delays in being reimbursed, and he can't comprehend the unfamiliar, tripartite government-physician-carrier combination that is trying to take care of him; and

"The government itself is dissatisfied and seeks to blame the carriers or the physicians, or both, for the delays and confusion;

"The Congress, keenly aware of all of the dissatisfactions registered by all parties, is additionally concerned because it recognizes it has created an open-end program with rising and perhaps uncontrollable costs."

CPS Adopts Blue Shield Name

The giant California Physicians Service, voluntary prepayment arm of the California Medical Association, has announced that it will use the name California Blue Shield.

Plan officials said that the move was intended to achieve closer identity with the National Association of Blue Shield Plans and to take advantage of its national advertising campaigns.

Although California Physicians Service will remain as the corporate name, all generic reference in communications and advertising will be California Blue Shield. The plan was organized in 1939 and is governed by a 19 member board of directors consisting of 14 physicians selected by the California Medical Association and five members from the general public.

removes the mental blur



that clouds vision

SOLEFOTON®

Each tablet or capsule contains

PHENOBARBITAL.....16 mg.

(Warning: may be habit forming)

BENSULFOID® (See P D R).....65 mg.

Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.

Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING
WITHOUT PRESCRIPTION

— AVAILABLE —

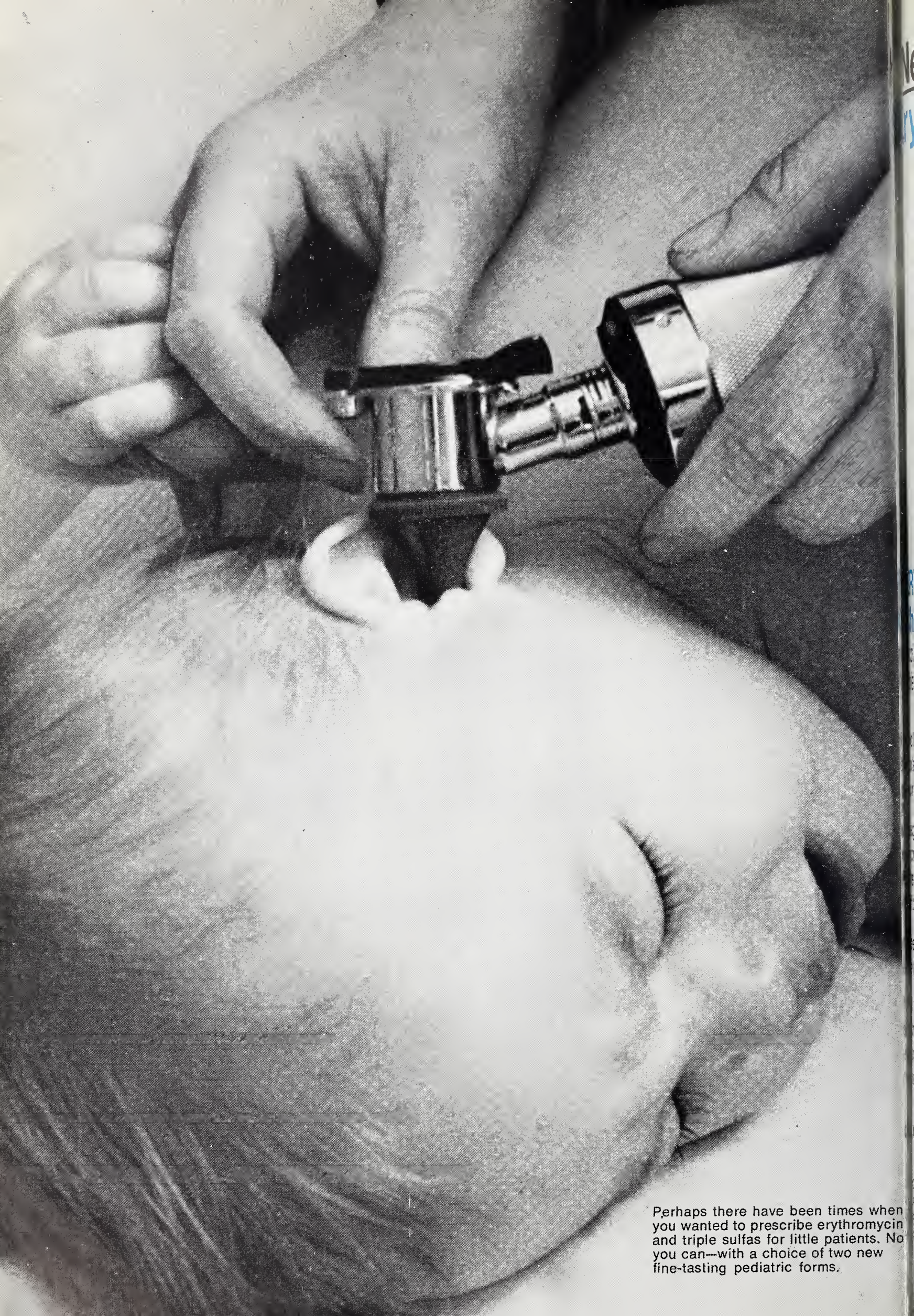
Solfoton (yellow, uncoated tablets "P")
100s, 500s, 5000s

Solfoton Capsules (yellow and brown)
100s, 500s, 1000s

Solfoton S/C (sugar-coated beige tablets)
100s, 500s, 4000s

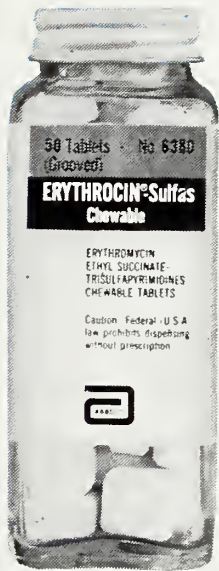
WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of erythromycin and Triple Sulfas



ERYTHROCIN®-SULFAS Chewable

(Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged 4 months to 18 years.

Diagnoses (multiple in some cases) presented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

Clinical cure rate of 94.5%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
 Alley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



ERYTHROCIN®-SULFAS Granules

(Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief Summary on next page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



Auxiliary to Fete Kids at Atlantic City

A three-day program combining the area's seaside and boardwalk activities with historic sight-seeing will be available for physicians' children during the Atlantic City convention, June 18-22. The program, arranged by the Woman's Auxiliary to the American Medical Association, will be handled by Gulliver's Trails, Inc.

On Monday, June 19, pre-teens and teens will participate in an all-day boat trip and boardwalk program. This includes an hour voyage around Atlantic City; lunch; tour of a salt water taffy factory; visit to Tussaud Wax Museum, and a choice of pool or ocean swimming, ice skating or a tour of the National Aviation Experimental Center.

Tuesday's program covers an island excursion with sports, games, speed boat rides, water skiing, aquaplaning (for those with parental permission) and a picnic. Following a rolling chair ride on the boardwalk, the two groups will tour the Towne (sic) of Smithville, historic restoration village.

Monday and Tuesday must be taken as a combined package tour. Total cost for one child, including lunches and transportation, is \$23. For two or more children in one family, the price is \$21 each.

A choice of two daytime tours is offered Wednesday, June 21. The first, a visit to Philadelphia, includes Independence Hall, Betsy Ross House, Christ Church, and Franklin Institute, with push-button exhibits covering aviation, science and astronomy. Time permitting, a trip will be made to Commodore Dewey's flagship, the *U.S.S. Olympia*.

The alternate tour covers highlights of Atlantic City, such as Absecon Lighthouse, then on to Batsto (sic), a restored Revolutionary War iron town, with its grist mill and old forge. A stage coach ride and swimming party wind up the day.

Total price for each of the Wednesday events is \$11.50 for one child or \$10 each for two or more children in the same family.

A special evening party will be held Tuesday, June 20. Teens will have dinner before going to the Million Dollar Pier for rides, followed by either a bowling tournament or a movie. Price is \$12.50. For those in the 6 to 12 age bracket, plans have been made for dinner, games, rides on the boardwalk and a movie, at a cost of \$11.50.

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

June 1967

Dear Doctor:

The American Hospital Association has shaken up the Social Security Administration by threatening to withdraw from Medicare. Kenneth Williams, AHA Washington office director, says that payments to hospitals are "grossly inadequate."

With over-65 Medicare patients now occupying nearly a third of the nation's hospital beds, the issue could be critical. The AHA said that if reimbursement were not improved, that "hospitals could look to the old people to pay the bills."

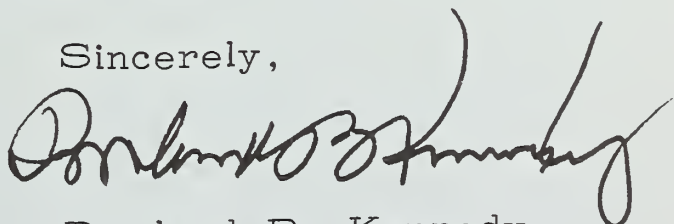
The American Academy of Pediatrics says that it is unnecessary to enact legislation for compulsory PKU testing. Emphasizing that "no other disease warrants similar legislation," AAP spokesmen urge that research on metabolic disease be allowed to proceed freely, unhampered by legislation. More and more state legislatures are getting proposals for mandatory PKU testing, sponsored mainly by nonmedical groups.

Thirty-seven Mississippi hospitals are certified by the Joint Commission on Accreditation of Hospitals. The newest listing was released showing that more American hospitals than ever before have qualified for the accreditation accolade. Institutions of less than 25 beds are no longer eligible for consideration by JCAH.

In what may well be a record, 220,000 Mississippians have received more than \$23 million in 1966 federal income tax refunds. The early rebates to taxpayers is made possible by the computer center at Chamblee, Georgia, according to J. C. Martin, Jr., the Mississippi district director. He said that the filing of returns was the best yet and thanked citizens for their cooperation who are something less than rich now.

Newsletter's face is deep red over a monumental boo-boo last month, and the readers have let us know, too. The item on the Atlantic City convention auditorium, where, incidentally, the AMA meets June 18-22, said "\$10" instead of "\$10 million." One good MSMA member even sent his check for \$10, offering to buy the auditorium. We checked, but they wouldn't sell.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

CMA Delegates Debate Milk, Fags, Credit Cards

San Francisco - Delegates to the 96th Annual Session of the giant California Medical Association have questioned whether raw milk should be sold in the state and wondered about airlines giving complimentary cigarettes to air travelers. The delegates also asked if plastic, embossed credit cards shouldn't be given to welfare and Medicare beneficiaries. Additional actions related to motorcyclists' wearing protective headgear and minimum physical conditions for blood donors.

Violent Deaths Studied By Pharmaceutical Firm

Detroit - Parke, Davis and Company says that a study in the United States shows that males account for seven out of 10 violent deaths. The two extra-continental states provide the extremes: Alaska has the high with 156 per 100,000 and Hawaii is the low with only 30 per 100,000. Mississippi cards a median low with 70 per 100,000.

Medicare Study Details Part 1-B Services

Baltimore - First findings in the study authorized by the Social Security Administration on Part 1-B of Medicare shows that about a third of the enrollees have made use of the program. Average payments are only \$31 per beneficiary, however, and utilization is seen to increase with age. About 2 million of the near-18 million enrollees met the deductible by September of 1966.

AMA Makes Strong Stand On Doctor-Draft

Washington - AMA witnesses testifying before the Senate Armed Services Committee said that American medicine is concerned with the highest level of health care services for the armed forces but it is equally concerned with the health of all citizens. Toward realizing that end, they stated, the Defense Department should be required to make pre-draft manpower allocations and to take the minimum number of physicians into service consistent with the mission of the armed forces.

Medical Education Costs Top Previous Records

Evanston, Ill. - The Association of American Medical Colleges says that the nation's medical schools spent a record \$319.7 million in 1966, a 12 per cent increase over the previous year. The figure is exclusive of research and includes a mean of \$76,000 in federal teaching funds per accredited school. More than half of the schools have annual budgets exceeding \$2 million.

now NovestrolTM (ethinyl estradiol U.S.P.)

estrogen replacement therapy

for the menopausal syndrome and female hypogonadism. Novestrol, a pure synthetic estrogen derivative, is related to estradiol which is the primary hormone of the ovarian follicle. It is effective orally and has all the actions of naturally occurring estrogen.

Ethinyl estradiol is the most active estrogen known. In addition to its high potency, Novestrol offers patients the advantages of minimal side effects, low cost, and convenience. Usually only a single daily dose is necessary.

Description: Each green, sugar-coated tablet contains 0.02 mg. of ethinyl estradiol U.S.P., a pure synthetic estrogen derivative, the most active estrogen known.

Indications: Menopausal syndrome and female hypogonadism.

Contraindications: Patients with tumors which estrogen might stimulate.

Precautions: Examine patients for mammary or reproductive system neoplasm. Give with great care, if at all, to patients who have precancerous lesions or family history of cancer.

Prolonged administration or high doses may produce anterior pituitary suppression. Endometrial bleeding can usually be avoided by cyclic administration at lowest effective dose and addition of progesterone during last half of cycle. Endometrial hyperplasia may develop in spite of cyclic therapy.

Side Effects: Occasional gastrointestinal disturbances, headache and vertigo. These usually disappear following proper dosage reduction.

Dosage and Administration: Determine minimum effective dose and maintain only as long as necessary.

Menopausal Syndrome: One or two tablets (0.02 or 0.04 mg.) daily. Omit therapy one week each month. Repeat cyclic therapy until satisfactory response is obtained. Advise patient that vaginal bleeding may occur.

Female Hypogonadism: Two tablets (0.04 mg.) one to three times daily for two weeks followed by progesterone for two weeks. Continue cyclic therapy for 3-6 months; then withdraw therapy to determine if normal cycle will be instituted. Additional cyclic therapy may be required in some patients.

WILLIAM H. RORER, INC. Fort Washington, Pa.



Gadget Takes Pulse Visibly and Audibly

Pulse rates may now be read directly from a meter, eliminating the possibility of human error while determining the rate in a fraction of the usual time. The new technique is made possible by use of a miniaturized electronic pulse rate indicator consisting of a simple finger sensor wired to a direct-reading meter encased in a housing not much larger than a pack of king-sized cigarettes.

In addition to being a useful instrument during office visits, the pulse rate indicator has many special uses. For example, it will detect dangerous acceleration of pulse and heart beat following the use of medication by sufferers of asthma, bronchitis or emphysema.

A beep signal is in the meter housing to reproduce every pulse beat audibly. This is especially useful during operative and intensive care periods because it gives an immediate audible indication of any rate variation. Provision is made for taping the sensor to the patient's finger during periods of prolonged pulse monitoring.

The pulse rate indicator is powered by a single nine-volt transistor radio battery, and is available with meter and audible signal, or audible signal only. The basic model sells for about \$70.



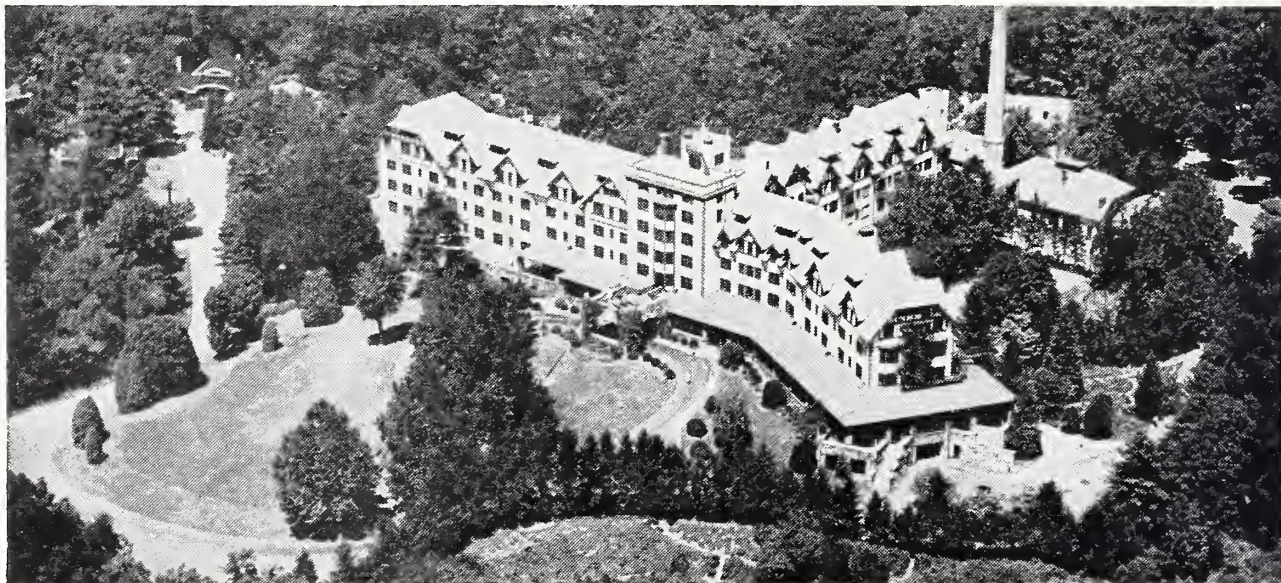
A finger sensor receptacle reads the pulse of a patient almost instantly both by indicated rate and a beep through the tiny speaker. The cigarette pack-size device sells for about \$70.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.

ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.

MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.



ORIGINAL PAPERS

Advances in Antibiotic Therapy

FRED ALLISON, JR., M.D.

New York, New York

THE MODERN ERA in antibiotics had its beginning in 1957 when the penicillin molecule was finally synthesized.¹ Although this feat was scientifically remarkable, the complexities of the process made it commercially unattractive as a source for penicillin. In 1959, however, it was found for the first time that the fermentation process for producing penicillin could be selectively controlled.² By this means it was possible to obtain large quantities of the basic nucleus for the penicillin molecule, 6-amino-penicillanic acid (Figure 1). From this it then became a reality pharmacologically to modify the basic molecule by adding a side chain of any desired configuration. Thereafter, a group of partially synthesized penicillins were produced and their impact upon the problems of infectious diseases has been profound indeed.³

Benzylpenicillin (penicillin G) was found to be the most active penicillin produced by the fermentation procedure. In its natural state, it is a highly unstable acid, but it can be converted to a stable sodium or potassium salt during the process of extraction. In the purified form now available commercially, penicillin G represents the near ideal agent for antibacterial chemotherapy.

The properties exhibited by penicillin G may be briefly summarized as follows.⁴ Although quite stable in dry form, it loses potency rapidly in solution, particularly if the pH is less than 5 or over 8. Heat accelerates decomposition as do a

The future for development of safer and more potent antimicrobial agents seems bright indeed. The physician in practice, however, may not find it a reasonable expenditure of time, on an everyday basis, to attempt to maintain an up to the minute familiarity with each new chemotherapeutic compound. The author recommends that clinicians become thoroughly grounded in not only the application but also the limitations of a select number of antibiotics for general as well as specific use in the field of infectious diseases. He suggests that exotic and often times more toxic drugs be reserved for the unusual or difficult case. The author discusses the uses and limitations of currently available antibiotics.

variety of metal ions and other organic substances. Most importantly, hydrolysis of the beta lactam ring (Figure 1) results in the formation of penicilloic acid which is virtually lacking in antimicrobial activity. Preservation of the beta lactam ring is, therefore, highly important for insuring antibiotic potency. Bacterial penicillinases

From the Department of Cellular Medicine, Rockefeller University Hospital.

At the time of authorship, Dr. Allison was from the Department of Medicine, University of Mississippi School of Medicine. He is now on sabbatical leave.

Read before the Section on Medicine, 98th Annual Session, Mississippi State Medical Association, Jackson, May 12, 1966.

from either gram positive or gram negative sources are capable of rupturing this chemical bond. Although a number of naturally occurring penicillins are structurally similar, they each have the same characteristic sensitivity to penicillinase.

When given to man, penicillin G must be injected parenterally to insure adequate blood and tissue levels since oral administration results in virtually complete destruction by the low pH of the stomach. There is an exceedingly low level of toxicity for mammalian cells, a fact that insures a wide margin of therapeutic safety in the treatment of clinical infections. In emergency situations, several hundred million units of penicillin administered parenterally each day but for relatively short periods failed to elicit significant toxic manifestations. It is likely that the drug may be eliminated by several routes although renal excretion probably accounts for as much as 80 to 85 per cent of clearance from the body. Awareness of this fact has made it possible to develop substances that block tubular excretion of the penicillin and in turn to enhance blood and tissue levels of the agent. Probenicid is such a drug.

PENICILLIN POTENTIATION

Recently, Kunin and colleagues have approached the problem of enhancing the effectiveness of penicillin in mammalian systems by introducing chemical substances to compete with binding sites

serum proteins interfered with the antibiotic activity, an analogue to compete for these binding sites might leave more free penicillin and thereby enhance effectiveness. The results so far have been promising, yet not sufficiently so to warrant application to clinical therapy in man.

IM, IV HALF-LIFE

Due to the short half-life of penicillin administered either intramuscularly or intravenously, salts of the compound were developed with low levels of solubility to delay absorption from sites of injection and thereby to potentiate tissue and blood levels. Of the many available, procaine penicillin and benzathine penicillin have achieved widest usage and acceptance. Procaine penicillin, administered intramuscularly, provides blood, tissue, and urine levels of the antibiotic of sufficient magnitude to control infections of moderate intensity for as long as 12 to 24 hours. Benzathine penicillin, administered intramuscularly, is more slowly absorbed so that low yet therapeutic blood and tissue levels may be detected for as long as 12 to 30 days depending upon the quantity administered. Blood levels provided by the latter agent, it should be noted, are much lower than achieved with other salts of penicillin and benzathine penicillin should be reserved either for prophylaxis against rheumatic fever or for management of infections that require a minimal tissue concentration of the agent.

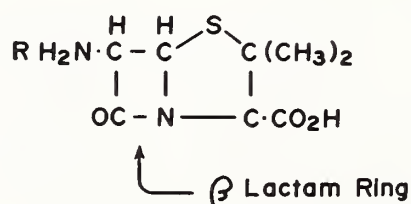
In the mid-1950s, phenoxymethyl penicillin, a semisynthetic penicillin (i.e. produced by selective priming of the fermentation medium), was discovered and noted to have considerable stability at low pH. With an antibacterial spectrum essentially equivalent to the parenterally administered forms of penicillin, phenoxymethyl penicillin (penicillin V) represented the first member of this group suitable for oral administration.

TYPES EQUALLY EFFECTIVE

These types of penicillin are each equally active against pneumococcus, group A streptococcus, *Streptococcus viridans*, *corynebacteria*, *Neisseria*, the *Clostridia*, *Salmonella*, and *Proteus mirabilis*. Bacterial resistance to penicillin usually involves production of a penicillinase although some resistant organisms are indifferent to penicillin and do not produce the enzyme.

Untoward reaction to penicillin as hypersensitivity may appear either as an immediate response with anaphylaxis or as a delayed skin eruption. Both types of reactions are indications for withdrawal of the drug. There is some evidence to

6-Aminopenicillanic acid



Benzyl penicillin (G)

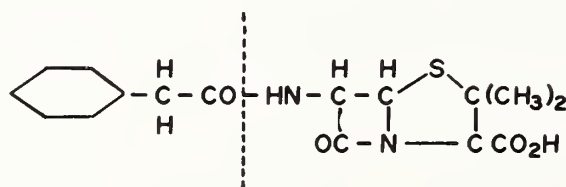


Figure 1

for penicillin in serum protein and tissue.⁵ It was reasoned that since the binding of penicillin by

suggest that hypersensitivity is more commonly encountered with large doses of the drug. Hypersensitivity is thought to be directly related to the 6-amino-penicillanic acid nucleus and for this reason, cross allergenicity with all other penicillins must be expected regardless of their source or derivation. Management of allergic patients that require penicillin for therapy represents a major challenge for the physician. For a detailed treatise of this problem, the reader is referred to other sources for information.⁶

The semi-synthetic penicillins may be divided into several categories, each characterized by properties not possessed by naturally occurring penicillins. These are: 1. acid resistance associated with better oral absorption than phenoxymethyl penicillin (penicillin V), 2. resistance to penicillinase, 3. action on a wider range of bacteria.

SEMI-SYNTHETIC PENICILLIN

Phenethicillin (Figure 2) was the first semi-synthetic penicillin produced commercially by enzymatic degradation of benzylpenicillin, and it was thought initially to possess significant resistance to staphylococcal penicillinase as well as a high degree of resistance to acid.⁴ Indeed, it was found that phenethicillin was absorbed from the gastrointestinal tract better than was penicillin V. On the other hand, it was probably less active than penicillin G against a variety of gram positive and gram negative organisms. Finally, phenethicillin was somewhat more resistant to penicillinase activity than penicillin G but not sufficiently so to make it substantially more useful for the management of difficult staphylococcal infections. Several other semi-synthetic penicillins with characteristics similar to phenethicillin have been described but none have been as successful therapeutically. The chief advantage of phenethicillin is that it can be given by mouth as a substitute for penicillin G or for penicillin V.

α Phenoxyethyl
(Phenethicillin)

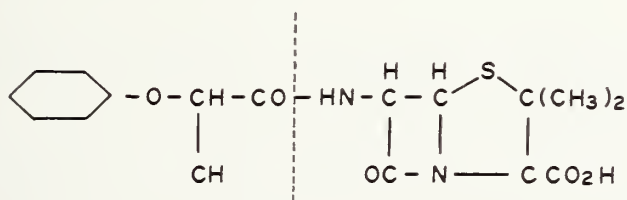


Figure 2

The semi-synthetic penicillin, methicillin (Figure 3), proved to be a major advance in the field

of antibiotics for it was the first penicillin found to be highly resistant to the action of staphylococcal penicillinase even though it accelerated production of this enzyme.⁴ It is, nevertheless, highly unstable in an acid environment and thus must be administered parenterally. Methicillin activity

2, 6-Dimethoxy phenyl
(Methicillin)

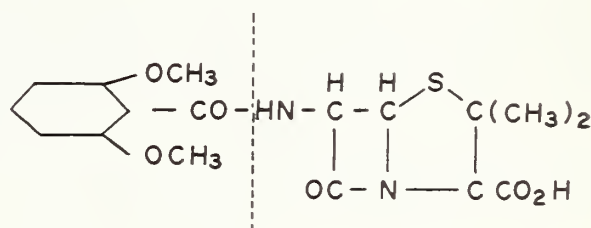


Figure 3

against various strains of staphylococcus is remarkably constant even though the organisms may be either highly sensitive or resistant to penicillin G. Staphylococcal resistance to methicillin has been found rarely and apparently involves metabolic processes different from that of penicillinase production. Methicillin has been found also to be active against other gram positive organisms but is decidedly inferior to penicillin G in this regard. Pharmacologically, methicillin is rapidly excreted by the kidney, but blood and tissue levels may be enhanced by the oral administration of probenecid. It is similar to penicillin G with regard to toxic manifestations. Occasional instances of idiosyncrasy to methicillin have been recorded including anaphylaxis, but despite this it has gained a highly respected position as a therapeutic agent against staphylococcal disease.

SURGICAL DRAINAGE NECESSARY

It should be emphasized that methicillin does not eliminate need for surgical drainage of closed staphylococcal infections for therapeutic failures have occurred when evacuation of pus has been inadequate. Superinfections with gram negative organisms of the *Klebsiella-aerobacter*, *Pseudomonas* or *Proteus* species have been encountered frequently and must be watched for during therapy with methicillin. Because of rapid excretion and relatively high levels required for successful control of infection, 6 to 18 gm. of methicillin should be administered daily in divided doses either intramuscularly or intravenously. Failures with this agent usually have been due either to insufficient dosage of the drug or to inadequate drainage of a closed infection.

The group of new semi-synthetic penicillins (Figure 4) includes oxacillin, nafcillin, and cloxacillin.⁴ They have been developed since methicillin and differ from this compound chiefly by the high degree of stability in acid solutions. Although these penicillins also stimulate penicillinase production by staphylococci as does methicillin, they are just as highly resistant to this enzyme. In addition and in their favor, this group of penicillins has a broader range of effectiveness against other gram positive bacteria such as pneumococcus, group A streptococcus, *Corynebacteria*, and *Proteus mirabilis*. For this reason the isoxazolyl penicillins have earned a substantial position as useful agents in the management of a variety of infections.

ADMINISTRATION FLEXIBILITY

The pharmacological properties of these penicillins are similar to methicillin, but they may be administered by mouth as well as parenterally and their renal excretion may be blocked by probenecid. Since they are effective at low dosage yet achieve satisfactory blood levels and are less expensive than methicillin, the isoxazolyl penicillins may represent not only an economical but also a superior antimicrobial substitute for methicillin. If these potentialities are supported by trial and time, it is expected that the isoxazolyl penicillins may replace methicillin therapeutically.

In contrast to the narrow antibacterial spectrum

known for penicillin G, ampicillin has been found to have a rather wide range of activity.⁴ Ampicillin is, however, destroyed by penicillinases, but it is stable in acid solutions so that it may be administered orally and parenterally (Figure 5).

Aminobenzyl penicillin (Ampicillin)

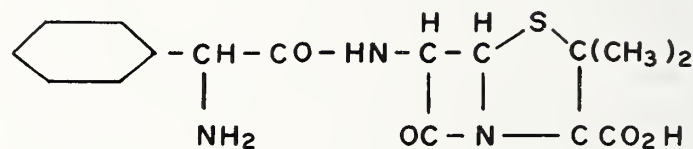


Figure 5

Ampicillin may have a spectrum as broad as that of the tetracyclines. For example, ampicillin has been found to be bactericidal not only for gram positive organisms killed by penicillin G such as non-penicillinase producing staphylococcus, but also for Group A streptococcus, pneumococcus, and the *Neisseria*. Furthermore, it has been found to be effective against *Hemophilus influenza*, *Escherichia coli*, various strains of the *Salmonella* species, the *Shigella*, *Proteus mirabilis*, and certain strains of the *Klebsiella-aerobacter* group.

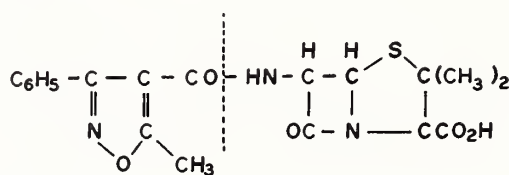
Based upon sound *in vitro* data as well as an expanding clinical experience, the evidence so far suggests that ampicillin may become, in time, the agent of choice for management of the prevalent acute bacterial meningitides (meningococcal, pneumococcal, and influenzal), and for control of acute uncomplicated urinary tract infections due to sensitive strains of *E. coli*. In addition to the advantages apparent in possessing a broad antibacterial spectrum, ampicillin has been found virtually lacking in certain of the undesirable side effects of the tetracyclines. Since ampicillin is economically comparable to the established broad spectrum drugs, there is good reason to anticipate a substantial future for its use.

CEPHALOSPORINACTIVITY

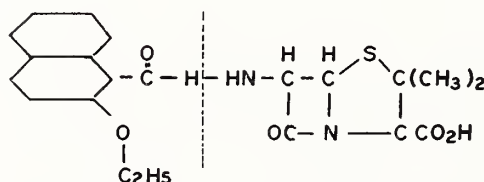
Products from several *Cephalosporins* have been studied for antibiotic activity. One of these, cephalothin (Figure 6), has been released for clinical use after extended evaluation.⁷ Although not a penicillin, cephalothin is structurally similar including a beta lactam ring. It too is produced semi-synthetically as are the new penicillins. Pharmacologically, cephalothin is unstable under conditions of low pH and must be administered parenterally. It is excreted in part by the kidney

Isoxazolyl penicillins

Oxacillin



Nafcillin



Cloxacillin

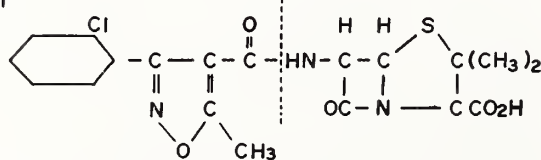


Figure 4

tubule and can be selectively blocked at this level by probenecid. Cephalothin is relatively non-toxic for mammalian cells and for this reason can be administered with little danger of adverse reaction from accumulation within tissue and blood in patients with inadequate renal excretory function. Hypersensitivity reactions to cephalothin, of both rapid and delayed types, have been recorded in man although not of excessive frequency. There is little evidence for cross-hypersensitivity with other antibiotics and particularly with penicillin although this may not be entirely true as has been suggested by recent reports.⁷ Even so, the infrequent association of cross-allergenicity has proved an especial attraction for this drug.

Cephalothin has a wide spectrum as a bactericidal agent. It is resistant to the action of bacterial penicillinases and is effective against staphylococci resistant to penicillin G. In a similar manner, cephalothin is also active against pneumococcus, *Neisseria*, *Hemophilus* species, the coliform group including *Klebsiella-aerobacter*, *Proteus mirabilis*, and most members of the streptococcus species with exceptions in the enterococci. As a result of this wide range of effectiveness, cephalothin has achieved substantial repute for clinical excellence

Cephalothin

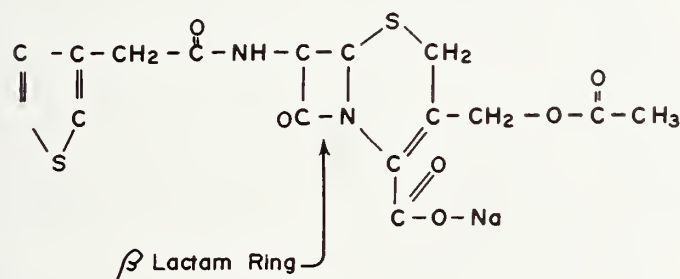


Figure 6

in an unusually short time. Usefulness in patients with renal insufficiency has been one great advantage enjoyed by cephalothin. Apparently, cephalothin has been well tolerated with little trouble arising from drug accumulation. Another point in its favor has been for patients reputed to be sensitive to the penicillins.

Parenteral therapy in the range of 40-80 mg/kg/24 hours either intravenously or intramuscularly has been recommended. In adults, this amounts to 2 to 6 gm. daily. Pain at the site of intramuscular injection has been troublesome and in some cases has necessitated administration intravenously or change to another drug. Local abscess formation with necrosis has not been reported to the author's best knowledge.

The erythromycin group of antibiotics, characterized by a large lactone ring, are classified as the macrolides.⁸ Several relatively non-toxic members of this family, produced by various actinomycetes, are active against many gram positive bacteria and a few gram negative organisms. Their pharmacologic properties have been defined with some certainty. The better known representatives are erythromycin, oleandomycin, spiramycin, and leucomycin. Even though there are numerous active members of this group, only erythromycin and oleandomycin will be discussed at this time since the others have not achieved significant clinical application.

BACTERIOSTATIC AGENTS

Erythromycin and its salts are more potent than the other macrolides. The different erythromycins have comparable antibacterial spectra and are considered bacteriostatic although in a few instances they have been found to act as bactericidals. In general, they are effective against staphylococcus, streptococcus, pneumococcus, the *Corynebacteria* and members of the *Hemophilus* species. Resistance to these agents *in vivo* and *in vitro* develops rather rapidly and there is a high order of cross-resistance among the macrolides. Toxic reactions in man have been relatively uncommon although high doses of erythromycin given by mouth have caused distressing gastrointestinal symptoms. Blood dyscrasias, skin eruptions, neurologic dysfunction, and other manifestations of hypersensitivity have been uncommon and for this reason, the erythromycins have been considered unusually safe for human use. A few cases of cholestatic jaundice associated with esters of erythromycin and oleandomycin have been encountered infrequently. Fortunately, the number of patients involved has been too small to curtail their clinical application.

Oleandomycin is available commercially as triacetyloleandomycin and behaves much as erythromycin. In general, however, oleandomycin is not considered quite the equivalent of erythromycin and for this reason has never achieved as extensive usage.

ERYTHROMYCIN DOSAGE

Erythromycin may be administered either orally or parenterally for a total daily dose of one to four grams in divided doses. In recent years, the propionic ester of erythromycin has been reputed to give better oral absorption with higher blood levels and more desirable therapeutic re-

sults. As a consequence, the other preparations have enjoyed less use. Oleandomycin is administered exclusively by mouth in a dosage range comparable to erythromycin.

Four tetracyclines have been adopted clinically.⁹ Structurally, there is a remarkable degree of similarity between the compounds. For this reason and because there is considerable pharmacologic resemblance, their characteristics can be discussed as a group. Chlortetracycline first became available in 1948 and was found to have a broad range of activity against both gram positive and gram negative bacteria. In subsequent years, oxytetracycline, tetracycline, and demethylchlortetracycline were developed with the last released in 1960. Marked by only occasional exceptions, these drugs may be used interchangeably against sensitive bacteria. Furthermore, they may be administered either parenterally or orally and are well tolerated with remarkably few occasions of true hypersensitivity.

Tetracycline, oxytetracycline, and chlortetracycline are about equally well absorbed and achieve comparable blood, tissue, and urine levels after administration of 250 mg. orally. Demethylchlortetracycline produces comparable levels after administration of 150 mg. by mouth. Better absorption can be expected when these drugs are given on an empty stomach and when substances that form chelates are avoided. Little advantage can be expected from use of the various salts of the tetracyclines, i.e., phosphate esters and glucosamines that achieved commercial prominence several years ago.

PARENTERAL DOSAGE

Parenteral administration demands a smaller amount of drug and adequate concentrations for most therapeutic needs can be reached with 100 mg. given either intramuscularly or intravenously every four to six hours. There is reason to believe from recent evidence that a slower absorption of demethylchlortetracycline reduces need for oral administration to no more often than every 12 hours. Although elimination from the body is chiefly by way of the kidneys, considerable clearance via the biliary tract is known to occur. There is apparently some variation between the different compounds with respect to renal clearances so that this fact must be kept in mind when patients with compromised kidney function are treated.

True toxic reactions to various members of this group have been recorded and are worth more

than brief mention since they have received wide attention in the medical literature.⁷ For instance, it is now known that these compounds may stain and discolor the deciduous teeth of children if administered during pregnancy and the first two months of life. There is no evidence that the teeth are otherwise structurally defective. As another example, outdated tetracycline has been found to produce a remarkable degree of tubular dysfunction with chemical features similar to, if not identical to, that of the Fanconi syndrome. These renal changes were reversed upon cessation of the drug.

CLINICAL PHOTSENSITIZATION

All of the tetracyclines fluoresce under ultraviolet light but only one compound, demethylchlortetracycline, has produced clinical photosensitization. Instances of severe sunburn have been encountered with use of this compound. The fluorescent capacity of the other drugs, particularly tetracycline, have attracted considerable interest as diagnostic tools for detection of malignant cells in cytologic material and also for the localization of intracutaneous parasites. Reports of hepatotoxicity with use of more than 2 gm. tetracycline daily during treatment of urinary infections in the third trimester of pregnancy have achieved considerable notoriety. The requirement for doses of greater magnitude than 2 gm. daily is infrequent and for this reason, therapy should rarely exceed this level. In yet another area, the induction of pseudomembranous enterocolitis due to superinfection by either staphylococcus or organisms of low pathogenicity has been associated particularly with the tetracyclines.

Despite such diverse difficulties, these compounds are exceedingly valuable therapeutically with specific effectiveness in many infections. For this reason, therefore, they should be highly regarded as useful pharmacologic agents.

Developed shortly after chlortetracycline, the broad-spectrum bacteriostatic drug chloramphenicol was found to have a remarkable range of antibiotic activity with particular use for control of typhoid fever and rickettsial diseases.¹⁰ Although highly regarded, by 1950 there was noted a disturbingly high occurrence of aplastic anemia following use of chloramphenicol. As a result of warnings concerning these potential dangers, usage of chloramphenicol became sporadic for the next few years. The emergence of highly resistant strains of bacteria within hospitals during the mid-1950's, however, signaled a return of this drug but on a more selective basis. In the last few years chloramphenicol has been employed with

even greater frequency and seemingly with little concern regarding the dangers of bone marrow suppression.

From the work of Wiesberger *et al.*, it is now recognized that chloramphenicol blocks protein synthesis intracellularly by interfering with messenger RNA.¹¹ For this reason, suppressive effects upon cells of the bone marrow can be most clearly related to the quantity and duration of drug administration. Recent evidence indicates that ill patients are more susceptible than well patients to suppression of the bone marrow by chloramphenicol. Marrow vacuolization and elevation of serum iron values, early clues of chloramphenicol toxicity, became apparent after the daily intake exceeded 50 mg. per kg. in 24 hours.¹² With few exceptions, there is little need to exceed a daily dose of 2 gm. chloramphenicol for adults. It should be noted that Waisbren has expressed a contrary view wherein a daily intake of 8 to 12 gm. of chloramphenicol was advocated for control of patients with difficult infections.¹³

A substantial portion of administered chloramphenicol is cleared via the biliary tract after conjugation as a glucuronide by cells of the liver. This fact is important in two respects.¹⁴ First, in the new born child and particularly the premature infant, liver cell maturation may be incomplete with a delayed appearance of glucuronyl transferase. This enzyme is responsible for the inactivation of chloramphenicol by conjugating it to form a glucuronide. As result, unconjugated, free chloramphenicol may accumulate within blood and tissue of infants to produce a clinical illness identified as "gray syndrome" by virtue of the peculiar color seen in the skin of these children. If not recognized and therapy discontinued, respiratory depression, vascular collapse and death may ensue.

RENAL EXCRETORY PROBLEM

The second area of importance regarding hepatic excretion of the drug involves patients with inadequate renal function. Deprived of the renal excretory route, reabsorption of conjugated but antibiotically inactive chloramphenicol from the intestinal tract may lead to excessive levels in blood and tissue. So far, this form of chloramphenicol has not been implicated as a bone marrow depressant although theoretically it might be since the potentially dangerous benzene ring is still intact.

Even when large amounts of chloramphenicol have been administered for a protracted time, other side effects have been minor. This fact as

well as the broad antibacterial spectrum have been responsible for the resurgent popularity of chloramphenicol. Since it is known that the tetracyclines have essentially the same spectrum as chloramphenicol, Ory and Yow recommended that chloramphenicol usage be limited to the management of typhoid fever and other *Salmonella* infections. It is possible that one of the semi-synthetic penicillins, particularly ampicillin, may represent another substitute or replacement for chloramphenicol.¹⁴

KANAMYCIN RELIABLE

One of the most potent antibiotics to be introduced in the relatively recent past, kanamycin has earned a secure position as a reliable agent for therapy of infectious problems. The chief advantage of kanamycin is that it is bactericidal with a broad spectrum against both gram positive and gram negative organisms. It must be given parenterally for systemic infections since absorption from the gastrointestinal tract is poor. Damage to the eighth cranial nerve and to the kidney associated with extended or excessive administration of kanamycin has been encountered with sufficient frequency to engender a healthy respect for its toxic properties.

Kanamycin is effective against staphylococcal infections although extensive use in some hospitals has led to the appearance of resistant organisms. Likewise, it is an efficient agent for management of stubborn gram negative bacillary infections caused by coliforms, *Klebsiella-aerobacter*, *Pseudomonas* species, and *proteus* species. Interestingly enough, kanamycin has substantial tuberculostatic properties and is under evaluation in this regard by the Veterans Administration. Therapy recommended for adult patients with normal kidney function ranges between 1 and 2 gm. daily in at least two doses 12 hours apart. The slow renal clearance of the drug permits it to be given in this way.

Patients with suspected or known renal insufficiency should be given small amounts of the drug at widely spaced intervals since the half life is greatly prolonged and an accumulation hazardous to the patient may result when appropriate precautions have not been observed. As a special note of warning, patients with diabetic nephropathy may be more susceptible to damage of the kidney by this drug. As a consequence, kanamycin should be used in diabetics with especial care.

Lincomycin was the only new antibiotic introduced in the first six months of 1965. Lincomycin has been found to have an antibacterial spectrum

similar to that of erythromycin and penicillin and in all likelihood will be regarded as an alternative drug. This is particularly probable since no cross-allergenicity between lincomycin and other antimicrobials has been reported. Toxic reactions have been few in number although clinical experience has not been extensive as yet. Gradual excretion by the kidneys makes it possible to give lincomycin either orally or parenterally on an eight or twelve hour basis, with assurances of adequate blood and tissue levels.

As a chemotherapeutic antimicrobial, nalidixic acid has been proposed for management of urinary tract infections due to gram negative and gram positive organisms. Oral administration results in very low blood levels but brisk renal excretion with good concentrations in the urine have been found. For this reason, nalidixic acid has been advocated as a urinary antiseptic and for therapy of acute uncomplicated urinary tract infections. It is not evident as yet, however, whether or not nalidixic acid will come to be regarded as a first line antimicrobial for management of chronic urinary tract infections. At present it is clear that it should not be depended upon as a sole drug for treatment when infection is of sufficient severity to produce systemic symptoms. Also, when complicated infections of the drainage tract that involve several organisms are encountered, nalidixic acid should not be relied upon as the only antimicrobial. For the moment, at least, nalidixic acid must be considered at least the equivalent of nitrofurantoin, the sulfonamides, and mandelic acid.

REASONABLE SAFETY MARGIN

Colistin and polymyxin B are nearly one and the same antibiotic since only minor structural differences between the two compounds may exist. These drugs have been slow in gaining acceptance because of early reports of kidney damage and peripheral nerve involvement after use of polymyxin B. Continued clinical trial has revealed, however, that the therapeutic margin of safety for these drugs is not unreasonable. Even so, usage should be reserved for management of difficult infections found to be caused by either sensitive members of the *Pseudomonas* species or other sensitive gram negative bacteria of the coliform and *Klebsiella-aerobactor* species.

Colistin and polymyxin B must be administered parenterally. It is recommended that from 1.5 to

5.0 mg. per kg. per 24 hours be given in divided doses. Rarely should it be necessary in adults to exceed a total of 300 mg. in 24 hours although in extenuating circumstances a greater amount may be in order. In the event of renal insufficiency, considerable care must be observed to minimize accumulation of the drug within the blood and tissue. In this instance it is relevant that toxic manifestations, usually appearing as peripheral neuropathy, have been reversible within a short time.

CONTRAINDICATIONS

The universal resistance to these drugs by members of the *Proteus* species makes it mandatory that colistin-polymyxin B not be used for treatment of these infections. Hypersensitivity in the form of fever and skin rash has been encountered occasionally but has not proved a major obstacle to use of the colistin-polymyxin drugs. Finally, patients with borderline renal function may suffer further compromise to kidney excretory activity after these drugs have been administered. Recovery may not always be complete. In any event, caution should be observed whenever they are administered.

It should be noted that colistin-polymyxin B are unique in their almost universal effectiveness against the *Pseudomonas* species. Because of this, consideration should be given to the possibility that these drugs be reserved exclusively for management of such infections. In this way it might be possible to conserve and prolong their usefulness by delaying widespread emergence of resistant bacteria.

The future for development of safer and more potent antimicrobial agents is bright indeed. This is so chiefly because of the expanded body of fundamental information that has accumulated with reference to modes of drug action as well as improved facility for producing new compounds of potential value. It is anticipated that antiviral drugs will be forthcoming as a result of vigorous research in this area. In view of the expanding body of evidence linking virus infections to the neoplastic process, it becomes apparent that the development of antimetabolite therapeutic compounds represents an area of enormous potential. As a point of fact, in cancer chemotherapy certain antibacterial compounds with considerable toxicity for mammalian cell lines may have promise therapeutically for the control of and perhaps even the cure of cancer. The prospect of these advances makes it imperative, therefore, for the clinician to maintain an informed interest with regard to new drugs in this field.

The physician in practice, however, may not find it a reasonable expenditure of time, on an everyday basis, to attempt to maintain an up to the minute familiarity with each new chemotherapeutic compound. In order to conserve both time and energy, clinicians should become thoroughly grounded in not only the application but also the limitations of a select number of antibiotics for general as well as specific use in the field of infectious diseases. In this way it should be possible to anticipate the response to therapy with specific agents and thereby to use drugs to best advantage. Exotic and often times more toxic drugs may thus be reserved for the unusual or difficult case. By such a calculated approach, it should be possible for the physician to provide the best in care for patients. ★★★

York Ave. and E. 66th St. (10021)

REFERENCES

1. Sheehan, J. C., and Henery-Logan, K. R.: The Total Synthesis of Penicillin V, *J. Am. Chem. Soc.* 79: 1262-1263, 1957.
2. Batchelor, F. R.; Doyle, F. P.; Nayler, J. H. C., and Rolinson, G. N.: Synthesis of Penicillin: 6-amino-penicillanic Acid in Penicillin Fermentations, *Nature* 183:257-258, 1959.
3. Chain, E. B.: Penicillinase-Resistant Penicillins and the Problem of the Penicillin-Resistant Staphylo-

- cocci, in *Resistance of Bacteria to the Penicillins*, ed. by A. V. S. de Reuck and M. P. Cameron, Boston, Little, Brown and Co., 1962.
4. Garrod, L. P.: The Penicillins, in *Experimental Chemotherapy*, ed. by R. J. Schnitzer and F. Hawking, New York, Academic Press, 1964, vol 3.
5. Kunin, C. M.: Inhibitors of Penicillin Binding to Serum Proteins, *J. Lab. & Clin. Med.* 65:416-431, 1965.
6. VanArsdel, P. P., Jr.: Allergic Reactions to Penicillin, *J.A.M.A.* 191:238-239, 1965.
7. Turck, M.; Anderson, K. N.; Smith, R. H.; Wallace, J. F., and Petersdorf, R. G.: Laboratory and Clinical Evaluation of a New Antibiotic-Cephalothin, *Ann. Int. Med.* 63:199-211, 1965.
8. Grundy, W. E.: The Macrolides (Erythromycin Group), in *Experimental Chemotherapy*, ed. by R. J. Schnitzer and F. Hawking, New York, Academic Press, 1964.
9. Barber, M.: The Tetracyclines, in *Experimental Chemotherapy*, ed. by R. J. Schnitzer and F. Hawking, New York, Academic Press, 1964.
10. Brock, T. C.: Chloramphenicol, in *Experimental Chemotherapy*, ed. by R. J. Schnitzer and F. Hawking, New York, Academic Press, 1964.
11. Weisberger, A. S.; Wolfe, S., and Armentrout, S.: Inhibition of Protein Synthesis in Mammalian Cell-Free Systems by Chloramphenicol, *J. Exper. Med.* 120:161-181, 1964.
12. Saidi, P.; Wallerstein, R. O., and Aggeler, P. M.: Effect of Chloramphenicol on Erythropoiesis, *J. Lab. & Clin. Med.* 57:247, 1961.
13. Waisbren, B. A.; Simski, C., and Chang, P. L.: Administration of Maximum Doses of Chloramphenicol, *Am. J. M. Sc.* 245:1-11, 1963.
14. Ory, E. M., and Yow, E. M.: The Use and Abuse of the Broad Spectrum Antibiotics, *J.A.M.A.* 185: 273-279, 1963.

VEGASITIS

At the recent Las Vegas AMA clinical convention, six Mormon physicians from Utah met in the Dunes Hotel coffee shop for breakfast. The obliging waitress brought hot coffee which was politely declined, since Mormons abstain from stimulating beverages. Instead, they ordered milk.

When the group had eaten and left, the waitress said to the hostess: "Did you ever before see as many men with ulcers in one crowd?"

Rheumatoid Arthritis: Pathogenesis and Differential Diagnosis

LOUIS SCHIESARI, M.D.
Jackson, Mississippi

RHEUMATOID ARTHRITIS (RA), with an estimated prevalence in the general population in the neighborhood of 4 per cent, is a collagen disease closely allied to the other collagen diseases such as systemic lupus erythematosus, scleroderma, polymyositis, polyarteritis and rheumatic fever.

The unknown etiologic agent responsible for the pathogenicity of rheumatoid arthritis stimulates the formation of the rheumatoid factor (RF). The RF is an antibody against a gamma globulin and is a globulin itself of heavy molecular weight (gamma M globulin). This factor per se is not dangerous since it has been demonstrated that serum rich in RF will not create disease when transfused in normal persons. Also the RF per se is not noxious to the tissue, but when it reacts with its antigen, an antigen antibody complex reaction takes place resulting in tissue damage with a mechanism identical to that of the Arthus phenomenon.

The antigen antibody complex is deposited under the endothelial cells of the small vessels giving rise to a vasculitis: capillaritis, venulitis, arteriolitis. Here, there is formation of chemotactic substances which cause collection of polymorphonuclear leukocytes which phagocytize the antigen antibody complex. After phagocytosis the lysosomes in the cytoplasm of the polys set free their acid hydrolase, a proteolytic enzyme. This leads to the death of the polys and to the attack on the vessel walls. As a result, there follows hemorrhagic necrosis of the vessels; the vessels become thrombosed which in turn causes necrosis of tissue.

The lysosomes, discovered in 1954 by de Duve,

are minute organelles found in the cytoplasm of the leukocytes and other cells, and are today the object of intense study in the field of research. The lysosomes can be considered as tiny sacs with a single membrane containing proteolytic enzymes. As long as this membrane is intact the cells are protected from the action of the lysosomes, but

Rheumatoid arthritis has an estimated prevalence in the general population in the neighborhood of 4 per cent. It is a collagen disease closely allied to other collagen diseases such as systemic lupus erythematosus, scleroderma, polymyositis, polyarteritis and rheumatic fever. Pertinent aspects of pathogenesis are reviewed and differential diagnosis discussed.

upon death of the leukocytes or when a damaging agent enters the cytoplasm, there follows alteration of the lysosomal sac; the proteolytic enzymes are thus set free, digesting first the cell itself, hence the name of suicidal sac given by de Duve, and then producing damage in the surrounding tissue.

There are substances like the corticosteroids and the chloroquine, but especially the former, which have a particular action in protecting the membrane of the lysosomal sac from disruption, and therefore the antiinflammatory role of these substances is ascribed to this protective action.

Going back to the pathogenesis of tissue damage, we can see that once necrosis of tissue has taken place, there is immediately the routine inflammatory response and repair: a granulation tissue reaction with marked proliferations of monocytes, histiocytes, fibroblasts and formations of

From the Department of Pathology, Mississippi Baptist Hospital.

Read before the monthly meeting of the Orthopedic Staff of the Mississippi Baptist Hospital, Jackson, Feb. 6, 1967.

capillary vessels. Due to the presence of large amounts of antibodies, there will be also an unusually large number of lymphocytes, often aggregated in follicles, and plasma cells. The ultimate result is what we call the pannus.

An identical process takes place in the skin, with formation of the so-called rheumatoid nodules, and in any other part of the body where these nodules or similar lesions are found. In the joints this pannus creeps over the cartilage, destroys it and penetrates the underlying bone.

But this is not the only mechanism. The synovial fluid, a product of the synovium, contains this antigen antibody complex; this is phagocytized by leukocytes which are numerous in the synovial fluid of RA, and this complex can be demonstrated as inclusions in these cells which are then called the "RA Cells." Again, these cells, after disruption of the lysosomal sac, release the hydrolytic enzymes which in this case attack directly the cartilage of the joints.

These engulfed particles are not specific since similar cytoplasmic inclusions are also found in trauma, gout and other forms of arthritis. The identification of these inclusions as RF is possible *in vitro* by liberating the RF by means of ultrasonic vibrations and then demonstrating the RF with the latex test; another method is by the immunofluorescence technique on the still intact leukocytes from the synovial fluid.

LATEX TEST

Practically, however, when such elaborate devices are not available, a latex test on fresh synovial fluid will suffice to detect the RF, frequently even at an earlier phase and in more patients than on serum; and a direct microscopic examination will reveal RA cells only, with no free granules or crystals in RA. On the other hand, monosodium urate and calcium pyrophosphate crystals of gout and articular chondrocalcinosis and particles of traumatic arthritis are also always found free in the joint fluid.

It should be emphasized that in psoriatic arthritis, juvenile RA, ankylosing spondylitis, arthritis of ulcerative colitis and arthritis with agammaglobulinemia, all variants of RA, the latex test on serum is usually negative while it is usually positive in the joint fluid, and that RA cells have been identified in synovial fluid in most of these variants.

The two most common biopsies submitted to the pathologist for histological diagnosis of rheumatoid arthritis are synovial tissue and skin nodules. The classical histologic picture of the syno-

vium in rheumatoid arthritis is represented by hypertrophy and hyperplasia of the synovial cells, infiltrations of lymphocytes and plasma cells, deposition of fibrinoid exudate and formations of lymphatic follicles with or without the germinal centers: the Allison-Ghormley nodules for those who like this eponym to remember the follicles without the germinal center.

NODULAR CHARACTERISTICS

In the skin nodules there are three classical features: the irregular zone of central necrosis, the adjacent prominent zone of fibrocytes interspersed with histiocytes and arranged in a palisade, and the peripheral zone of chronic inflammatory reactions. Neither the synovial nor the skin lesions are pathognomonic of rheumatoid disease and, therefore, a specific diagnosis based on histological changes cannot be rendered by the pathologist.

To begin with, it is impossible to distinguish with certainty a rheumatic nodule from a rheumatoid nodule. Secondly, neither of them in some cases can be told apart from an innocuous lesion, the granuloma annulare, although this tends to be located prevalently in the dermis rather than in the subcutaneous tissue. The nodular vasculitis as a variety of erythema nodosum and the necrosis lipoidica diabeticorum may occasionally come up in the differential diagnosis.

It has become common knowledge in recent years that a nodule removed from a child, and which on microscopic examination has all the characteristics of the rheumatoid nodule, cannot be diagnosed as such since in most cases it is an isolated, self-limited lesion, the child never developing systemic disease such as rheumatic fever or rheumatoid arthritis even when these nodules recur in the areas of previous excision or appear at new locations. Therefore, a better name for this type of lesion in children is pseudo-rheumatoid subcutaneous nodule. In adults it is known that subcutaneous rheumatic nodules may occur two to ten years before onset of symptomatic rheumatoid arthritis and, therefore, they assume a different significance.

SYNOVIAL PATHOLOGY

The specificity of the pathology of the synovium in rheumatoid arthritis was first challenged by Dr. Sherman who reported similar changes in joints damaged by tumor or trauma, and then by Sikes *et al.*, who saw the same histological alterations in many types of spontaneous and experimental articular infections; for example, the Ery-

sipelothrix polyarthritis of swine. This is the reason why the ultimate diagnosis of rheumatoid arthritis should not depend exclusively on the pathology report on a synovial or a skin nodule biopsy.

That these changes are not specific of rheumatoid arthritis has been re-emphasized recently on synovium removed from a seemingly newly described lesion, the erosive osteoarthritis. This lesion, as described by Barnett *et al.*, occurs in middle-aged women and affects the distal and proximal interphalangeal joints of the hands and sometimes the first carpometacarpal joints. The x-ray film reveals erosion in the interphalangeal joints and occasionally in the first carpometacarpal joints together with degenerative and osteophytic changes. Typically, the metacarpal phalangeal joints of the wrists are normal. Synovium from the interphalangeal joints of these patients reveals all the classic histological manifestations of RA, as previously described. No RF is present in serum.

Rheumatoid arthritis is not a disease confined to joints and periarticular tissue, but a systemic disease that can affect heart, lungs, eyes, skin, peripheral and central nervous system, and spleen. Two manifestations are probably of particular interest to the orthopedic surgeon. One is the mononeuritis multiplex: a non-symmetrical peripheral sensory and motor neuropathy of the lower extremities which is the result of vasculitis with occlusion of some of the small perineural blood vessels. The other is represented by the more common thrombotic lesions, also secondary to necrotizing vasculitis which may give rise to ischemic necrosis and gangrene of one or several digits on one or more extremities.

LABORATORY DIAGNOSIS

In order to complete this presentation a brief discussion of laboratory diagnoses is in order. Latex fixation test (based on the presence of RF) is positive in serum and synovial fluid of 75 to 90 per cent of RA patients, 20 per cent of L.E. patients and in serum of 3 per cent of normal individuals in whom a higher percentage is to be expected after 65 years of age. It is negative in serum of RA children, rheumatoid spondylitis patients and other variants of RA. It is positive in serum of a certain percentage of patients with sarcoidosis, dermatomyositis, chronic liver disease, leprosy, kala-azar.

C.R.P. (C-reactive protein; a protein never found in normal sera) is positive in acute phase

of RA and L.E.; it is always positive in patients with active rheumatic fever. This test is not specific since it is positive whenever there is an inflammatory or necrotic process going on anywhere in the body.

ASO titer (antistreptolysin O titer) is a test specific for group A streptococcal infection and, therefore, also for rheumatic fever. It is negative in RA, but useful in the differential diagnosis. L.E. test (test for antinuclear factor) is positive in 100 per cent of L.E. patients; it is positive in 20 to 60 per cent of RA patients in serum or synovial fluid or both.

TESTS OF FLUIDS

Electrophoresis in RA is characterized by hypoalbuminemia, increase alpha-2 globulin, and increase gamma globulin. One should remember that rheumatoid arthritis may be associated with agammaglobulinemia as in congenital agammaglobulinemia and primary "acquired" agammaglobulinemia.

In the pleural fluid a glucose value lower than 15 mg./100 ml. is virtually diagnostic of rheumatoid disease. The sedimentation rate is not specific and subject to too many influences to be reliable in the diagnosis of RA. The C.R.P. is a much better substitute.

The synovial fluid examination, which is especially useful in RA children and other variants of RA where serum examination is usually negative, should include a viscosity test (done at time of aspiration), a white cell and differential count, a Latex test and a search for RA cells. Viscosity is low in all types of arthritis except traumatic arthritis, osteoarthritis and systemic lupus erythematosus. The "string test" for viscosity is simple and reliable, and is done by allowing the fluid to drip from the syringe; a normal fluid strings out more than 3 cm. before separating. The fluid is then collected in a heparinized tube and sent to the laboratory for the other tests.

In closing, it is interesting to note a recent report from Switzerland on treatment of patients with rheumatoid arthritis. In 1964 a total of 1,748 surgical interventions were performed in 1,970 rheumatoid arthritis patients. Twenty-five per cent of the surgical interventions consisted of an early synovectomy, namely, a synovectomy without roentgenologic evidence of joint destruction. The results were excellent, with more than 90 per cent of the cases being free of symptoms and with good functional results. They conclude that the early synovectomy has a preventive action. This action is best seen when no cartilage erosion is yet pres-

ent. The synovectomy produces not only a local improvement which consists of a complete disappearance of pain but also produces an improvement of the general conditions with pronounced decrease in the intensity of serological reactions. The theoretic basis of the general action of the early synovectomy lies, according to the author, in the clinical observation and the result of research concerning the theory of autoimmunity and the function of the lysosomes in rheumatoid arthritis. ★★★

1190 N. State St. (39201)

REFERENCES

1. Sherman, M. S.: The Non-Specificity of Synovial Reactions, *Bull. Hosp. Joint Dis.* 12:110, 1951.
2. Sikes, D.; Neher, G. M., and Doyle, L. P.: The

Pathology of Chronic Arthritis Following Natural and Experimental Erysipelothrix Infection of Swine, *Am. J. Path.* 32:1241, 1956.

3. Peter, J. B.; Pearson, C. M., and Marmor, L.: Erosive Osteoarthritis of the Hands, *Arthritis Rheum.* 9:365, 1966.
4. Kidd, K. L., and Peter, J. B.: Erosive Osteoarthritis, *Radiology* 86:640, 1966.
5. Hollander, J. L.; Reginato, A., and Torralba, T. P.: Examination of Synovial Fluid as a Diagnostic Aid in Arthritis, *M. Clin. North America* 50:1281, 1966.
6. Barnett, E.; Kroenig, R., and Marmor, L.: Rheumatoid Arthritis and Its Systemic Manifestations, *Ann. Int. Med.* 65:1101, 1966.
7. Cattani, A.: Les Lysosomes, *Revue d'Etudes Clinique et Biologique* XI:235, 1966.
8. Sorkin, E.: Die Pathogene Bedeutung Immunologischer Reaktionen, *Schweiz. Mediz. Wochens.* 96:1129, 1966.
9. Cottier, H.: Zur Frage der Spezifität Histologischer Befunde by Allergischen Krankheiten, *Schweiz. Mediz. Wochens.* 96:1144, 1966.
10. Fehr, K.: Frühsynoviektomie by Chronischer Polyarthritis, *Schweiz. Mediz. Wochens.* 96:1628, 1966.

ETERNAL LOVE

The anxious father was reading in his upstairs bedroom waiting for his daughter's suitor to make his departure. Seeing the late hour, the father shouted from the top of the stairs:

"Hey, you down there! It's 2 o'clock in the morning. Do you think that you can spend the night?"

"Thank you, sir," was the reply, "but I'll have to call home first."

Treatment of Infertility In the Female

WILLIAM B. WIENER, M.D.
Jackson, Mississippi

IN DISCUSSING the treatment of the infertile female, one assumes that the husband has been examined and found to have a normal semen analysis and is able to deposit the semen in his wife's vagina. Also before treating the wife, we have to assume that she has had an infertility workup.

Frequently the only treatment needed for the infertile female is a visit to a physician at which time a detailed history and physical examination are done. How to time ovulation and intercourse habits are discussed. Often the infertile female voids or takes a douche immediately after intercourse. Many of these patients get pregnant within the next few months by merely staying in bed for one to three hours after intercourse, especially at the anticipated time of ovulation.

I also consider one of the diagnostic tests as therapeutic. I am speaking about the hysterosalpingogram. Either the liquid media frees adhesions or the iodine in the media has some therapeutic action on the tubal mucosa or cilia. Many of my patients become pregnant shortly after having a hysterosalpingogram. This seems to be the experience of others. Finola,¹ for example, recently reported that in his series of cases, 48 per cent of the infertile patients became pregnant within an average of 4.8 months after having one or more hysterosalpingograms. Some became pregnant as early as the first month and some 16 months later.

The cervical factors² to be considered are infections, abnormal cervical mucus, and the incompetent internal os. We see so many fertile women with a badly diseased cervix that I am not too sure that this is a cause of infertility. Nevertheless, I usually treat chronic cervicitis with the actual cautery.

Read before the Sectional Meeting, American College of Surgeons, New York, N. Y., March 1, 1967.

If the viscosity of the cervical mucus is poor in the mid-cycle, this can sometimes be remedied by having the patient take 0.1 mg. of stilbestrol daily for 10 days, starting on the 10th day of her menstrual cycle.

If no sperm are found in the cervical mucus at the post-coital test (the husband having a normal

Continued research in the development of new and better drugs, animal experimentation and better surgical techniques, should increase the chance of the infertile female to bear children. The author discusses current management considering in detail cervical factors, uterine factors, tubal factors and ovarian factors. He reviews diagnostic tests, and medical and surgical treatment.

sperm count) the possibility of anti-spermatozoal antibodies should be considered. This can be determined as reported by Franklin and Dukes.³ When antibodies are present, the husband's sperm should be kept from contact with the wife's vaginal mucosa for three or four months. This can be accomplished by the husband using a condom at intercourse.

In patients with a history of physical or x-ray findings of an incompetent internal cervical os, surgical correction of this will usually allow a pregnancy to go to full term. If treatment is done in the non-pregnant state, either the circlage procedure⁶ or the Lash⁵ procedure can be done. If the patient is pregnant, the circlage procedure should be done in the 14th to 16th week of pregnancy.

Uterine anomalies rarely prevent conception, but a large number of these pregnancies terminate in early or late abortions due to distortion of

the uterus. With a history of frequent abortions and x-ray findings of a bicornuate uterus, surgical unification of the uterus should be considered. The Strassmann metroplasty⁷ has gained wide acceptance. In Strassmann's recent article, he reported that in his series of patients, 98 per cent aborted before surgery and following surgery 85 per cent went to term. In addition to the Strassmann procedure, it should be noted that Tompkins recently reported another method for unifying the bicornuate uterus. He states it is easier to do and the same is accomplished as with the Strassmann procedure.

Often medium or large leiomyomas so distort the uterine cavity that conception is prevented or faulty implantation of the ovum occurs resulting in abortion. In such women, if no other cause for infertility is found, a myomectomy⁸ should be considered. If a myomectomy is done for infertility, approximately 50 per cent of these women will later conceive and deliver full-term infants. Ten to 15 per cent of women having myomectomies will have a recurrence of symptoms later necessitating a hysterectomy. There is also a rare chance of finding sarcomatous degeneration in a removed myoma.

EMPLOYMENT OF PESSARY

The retrodisplaced uterus has often been incriminated as the cause of infertility. The majority of women with a retrodisplaced uterus will get pregnant, but occasionally I have seen some where no other cause of infertility could be found. These were treated by placing the uterus anteriorly and inserting a Smith-Hodge pessary. While the pessary must be cleaned and replaced every six to eight weeks, if pregnancy occurs, the pessary should not be permanently removed until after the third month.

The treatment of infertility due to non-patency of the tube can sometimes be treated by surgery. Acute salpingitis and tuberculosis of the tubes should be treated medically. While these diseases can be cured, rarely will the tubes become patent. Surgical procedures include salpingolysis, salpingectomy, resection and anastomosis and tubal implantation.^{2, 4} By properly selecting cases and not attempting to repair grossly diseased tubes or those with hydrosalpinx or pyosalpinx, fair results can be obtained. The prognosis is best in those patients with fibrial adhesions, segmental closure, or closure due to tubal ligation.

Prosthetic devices of silicone elastic tubing and/or hoods, are used to splint the tubes and, if necessary, to protect and keep the fibria open. These devices are usually left in place six weeks

to three months. If tubing alone is used and it has been passed into the uterine cavity, it can be removed vaginally fairly easily. With hoods, another laparotomy must be done, unless one is very adept with the culdoscope in which case they may be removed through the cul-de-sac. In all tubal surgery, fine suture material should be used and all tissues handled gently. The overall full-term pregnancies occurring after tubal surgery still remains in a low range of 20-25 per cent. Ectopic pregnancies occur in 2-4 per cent of those who conceive.

OVULATION VIA CORTISONE

Until a few years ago, there was little to offer women who could not ovulate. With the advent of cortisone,⁹ it was found that small doses would often produce ovulation. Many patients treated with cortisone became pregnant and delivered normal, full-term babies. More recently, with the use of Clomiphene Citrate^{10, 11} alone or human menopausal gonadotrophin (Pergonal) in combination with human chorionic gonadotrophin,^{12, 13} ovulation could be made to occur as evidenced by a biphasic temperature curve or occurrence of pregnancy. These drugs are most likely to be effective in patients with endogenous estrogens, such as seen in secondary amenorrhea, dysfunctional uterine bleeding and Stein-Leventhal syndrome. They are not effective in women who have gonadal dysgenesis (Turner's syndrome), premature menopause or panhypopituitarism. Complications from use of these drugs are ovarian enlargement and ascites. Rarely is it now necessary to do wedge resections on polycystic ovaries as seen in the Stein-Leventhal syndrome. These patients should be treated medically first.

In patients with endometriosis, the diagnosis being made at the time of exploratory laparotomy, lesions can be resected or fulgurated. An attempt should always be made to leave at least a small portion of each ovary as ovulation will occur with a small amount of ovarian tissue. If later there is residual or recurrent disease, progesterone can be used to produce regression of the lesions.

EXPLORATORY LAPAROTOMY

After all tests have been done, including hormone determinations on 24-hour urine, and possible culdoscopic examination, and no definite cause of infertility has been found, an exploratory laparotomy might be considered. Horne¹⁴ recently reported his results with conservative laparotomies in 202 patients out of 926 infertile patients. These patients were completely worked up before as

above-mentioned. Procedures done were fulguration of endometrial lesions when present, tubal lavage, wedge resection of cystic ovaries, and uterine suspensions.

Large doses of Decadron and Phenergan were given to prevent post-operative adhesions as found by experimental work on dogs. Horne recommended that Decadron 20 mg. and Phenergan 25 mg. be given intramuscularly three hours prior to surgery. (These must be given in separate syringes as precipitation will occur if mixed.) Then the same amount is placed in the cul-de-sac by catheter at the time of closure of the abdomen and repeated intramuscularly at four hour intervals for 48 hours. A total dose of 280 mg. of Decadron and 350 mg. of Phenergan was given. These patients, in addition to the usual pre-operative workup and post-operative care, were weighed daily after surgery and 24-hour urinary output was recorded. They were given broad spectrum antibiotics for three days, the abdomen was closed with non-absorbable sutures and the skin sutures were left in for 10 to 14 days. Following surgery, 49 per cent of the patients became pregnant.

Metabolic conditions such as hypothyroidism and adreno-genital syndrome will respond to administration of the necessary hormone.^{2, 9} Psychogenic and hypothalamic factors should also be considered if no other cause for infertility can be found.

In conclusion then, each infertile couple should have a complete workup in as short a period of time as possible. Abnormal findings should be discussed with the couple and treatment advised. If surgery is recommended, the couple should be told of the successes and failures of the procedure so that they may better make a decision. If the chance for conception is extremely poor in spite of all treatment, then the patient should be urged to start procedures for adoption. In general the

younger the female, the shorter the time of infertility, the better is the chance for conception. Continued research in the development of new and better drugs with few side-effects, animal experimentation, and better surgical techniques, should increase the chance of the infertile female to bear children. ★★★

500-G East Woodrow Wilson (39216)

REFERENCES

1. Finola, G. C.: Hysterosalpingography in Tubal Obstruction and Infertility, *Am. J. Obst. & Gynec.* 89:924, 1964.
2. Jones, G. S., and Pourmand, K.: An Evaluation of Etiologic Factors and Therapy in 555 Private Patients With Primary Infertility, *Fertil. & Steril.* 13:398, 1962.
3. Franklin, R. R., and Dukes, C. D.: Anti-Spermatozoal Antibody and Unexplained Infertility, *Am. J. Obst. & Gynec.* 89:6, 1964.
4. McEwen, D. C.: Reconstructive Tubal Surgery, *Fertil. & Steril.* 17:39, 1966.
5. Lash, A. F.: Review of More Than 20 Years' Experience With the Incompetent Internal Os of the Cervix, *Fertil. & Steril.* 15:254, 1964.
6. Russo, J. N., and Palermينو, D. A.: The Modified Shirodkar Operation, *Am. J. Obst. & Gynec.* 91:238, 1965.
7. Strassmann, E. O.: Fertility and Unification of the Double Uterus, *Fertil. & Steril.* 17:165, 1966.
8. Wiener, W. B., and Head, C. M.: Abdominal Myomectomy a Surgical Procedure in Infertile Patients, *J. Miss. S.M.A.* 5:261, 1964.
9. Jefferies, W. McK.: The Endocrine Glands Other Than the Gonads, *Clinical Obst. & Gynec.* 8:73, 1965.
10. Charles, D.; Loraine, J. A.; Bell, E. T., and Harkness, M. D.: Further Observations on the Induction of Ovulation With Clomiphene, *Fertil. & Steril.* 17:351, 1966.
11. Kistner, R. W.: Use of Clomiphene Citrate, Human Chorionic Gonadotrophin for Induction of Ovulation in the Human Female, *Fertil. & Steril.* 17:569, 1966.
12. Gemzell, C. A.: Human Pituitary Gonadotrophins in the Treatment of Sterility, *Fertil. & Steril.* 17:149, 1966.
13. Traymore, M. L.; Sturgis, S. H.; Lieberman, B. L., and Goldstein, D. P.: Induction of Ovulation With Human Post-menopausal Gonadotrophin, *Fertil. & Steril.* 17:731, 1966.
14. Horne, H. W., Jr.: A New Medical Adjunct to Infertility Surgery—A Preliminary Report, *Fertil. & Steril.* 17:792, 1966.

NO FOOLING THE SMITHS

It couldn't have happened any time except April fool's day, when, in fact it did: At the San Pedro, Calif., Harbor General Hospital, Dr. Margaret Smith, a local obstetrician, delivered in rapid succession Robert Smith to Mrs. Ernestine Smith, Mark Smith to Mrs. Judith Smith, James Smith, Jr., to Mrs. Fletter Smith, and Cynthia Smith to Mrs. Carolyn Smith.

Radiologic Seminar LXII:

Cervical Rib

CARL R. HALE, M.D.
Hattiesburg, Mississippi

CERVICAL RIB is one of the numerous causes of compression of the subclavian artery and brachial nerve bundle. Symptoms and signs range from upper extremity pain and paresthesia to frank muscle weakness, claudication and cyanosis. If untreated, there may occur thrombosis of the subclavian artery which may rarely be followed by gangrene of the upper extremity with the possibility of cerebral emboli if the process is on the right.

Because of these possible serious results of cervico-brachial compression syndromes, a perpetual awareness of the problem is justified.

Embryologically the cervical rib is a supernumerary rib, usually arising from the 7th cervical vertebral segment and occasionally from the 5th or 6th cervical segment. In the embryo, nerves are much larger in proportion to ribs than in the fully developed adult. Where the nerves are unusually large, as in the cervical region, they interfere with and prevent development of a costal process. Thus the formation of a cervical rib from the transverse process of C-7 is relatively easy and occurs in about 5 to 6 tenths per cent of persons receiving chest films.¹

Probably more often there develops a non-ossified fibrous band or combination of ribs and band from the process of C-7.

From an x-ray standpoint, the identification of a cervical rib is usually relatively simple on PA film of the chest or frontal film of the cervical spine. If it is quite small, it may be visualized better on the chest film than on the cervical spine film. The latter is taken with technical factors designed to enhance the contrast and detail of relatively larger bones while the chest film is taken with a different quality and less quantity of radia-

tion. The result is that the tiny rib casts a denser or "whiter" shadow on the chest film. Large cervical ribs are seen in better detail on frontal film of the cervical spine as seen in Figure 1, but are also well seen on the chest film as in Figure 2. A very small cervical rib may be easily seen on a routine chest film but noted only with great difficulty on a cervical spine film.

One problem in diagnosis is distinguishing small first thoracic ribs from large cervical ribs. The difficulty is compounded if the division between cervical spine and thoracic spine is not known with certainty. A useful guide in this respect is the anatomical difference in the projection of the transverse processes of the upper thoracic segments as compared to the C-7 segment. The transverse processes of C-7 project laterally at an angle slightly below a plane perpendicular to the axis of the spine at the level of the origin of these processes, while the thoracic transverse processes project at an angle slightly above this plane. (See Figures 1 and 2.)

Of equal significance to the diagnosis of cervical rib is the fact that the compression syndrome may or may not be due to the rib or a band attached to it. It may be due to a combination of the rib or other anatomical structures or other separate structures entirely. In bilateral cervical ribs only one may produce compression, and this may not occur until the clavicle has grown to its full breadth in diameter medially and the shoulder muscles have reached their greatest mass. Both of these are said to occur at about 25 years.² Also, abnormal spine curve or simply a droop shoulder posture may contribute to the compression syndrome by decreasing the space where the subclavian artery and brachial plexus emerge from the thoracic inlet. It may be that the addition of some degree of atherosclerotic occlusive disease is necessary to produce symptoms.

From the Department of Radiology, Methodist Hospital.
Sponsored by the Mississippi Radiological Society.

A serious and possibly fatal complication may occur in young adults before the age in which atherosclerosis becomes a factor. This results from repeated irritation of the arterial wall by constant trauma and pressure by the cervical rib with resultant inflammation of the arterial wall followed by thrombus formation. Furthermore, this thrombus may propagate distally into the axillary artery and discharge emboli. It may also propagate proximally to the subclavian and common carotid junction on the right and discharge emboli into the carotid system producing cerebral infarction.³ (See Figure 3.) On the left, however, the subclavian and common carotid arteries arise separately from the aortic arch and the previous pathologic process would not apply.

OTHER CAUSAL FACTORS

Other important causes of cervicobrachial compression syndrome include: 1. Scalenus anticus syndrome where the scalenus anticus probably serves with other structures to passively compress the neurovascular bundle.^{4, 5, 6} 2. The first thoracic rib may compress the subclavian artery following elevation of the rib secondary to deformities of the spine, emphysema, and from callus following previously healed fracture.⁷ 3. The clavicle may compress the bundle in conjunction with the first rib by callus formation from previously

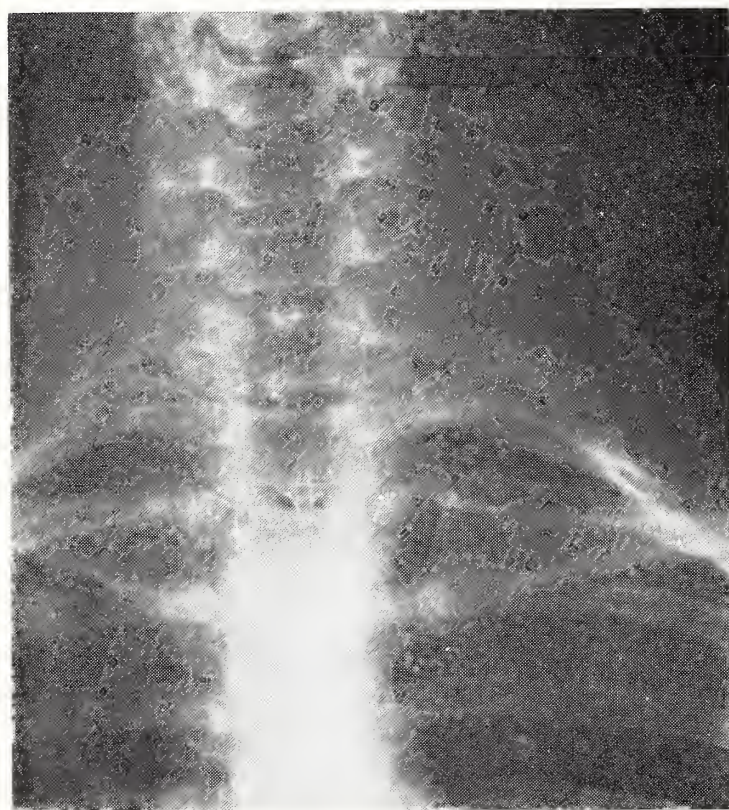


Figure 1. Prominent cervical ribs well shown in AP cervical view.

Tandearil® oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

JOURNAL MSMA

healed fracture or from a combination of the clavicle reaching its maximum diameter and breadth medially at the same time the shoulders attain their maximum weight and resultant droop shoulder posture.⁸ 4. Hyperabduction syndrome in which the bundle is compressed by the pectoralis minor muscle and its coracoid attachment with the arms in hyperabduction.⁹ 5. Rarely the scalenus medias, scalenus minimus, posterior belly of the omohyoid and anomalous arteries and bands of the median nerve may play a part.

Several tests designed to demonstrate decreased radial pulse with the arms or head and neck in specific positions are helpful in localizing the point of compression. Adson's test may demonstrate localization of the compression at a level of scalenus anticus or cervical rib.¹

Hyperabduction of the arms with decreased pulses and bruit in the axilla may localize the compression to the pectoralis minor area.⁹ Costoclavicular maneuvers may localize compression to the area between the clavicle and first rib.¹⁰

The differential diagnosis of upper extremity pain and paresthesis must include: 1. superior sulcus pulmonary tumor (Pancoast), 2. protruded cervical disc, 3. chronic occlusive arterial disease, 4. pain due to heart disease, 5. nerve root tumor, infection, or degenerative disease, 6. scapulo-costal

rect droop shoulder posture. When definite neurological or vascular changes are present, surgery is indicated. The procedure is adapted to the ana-

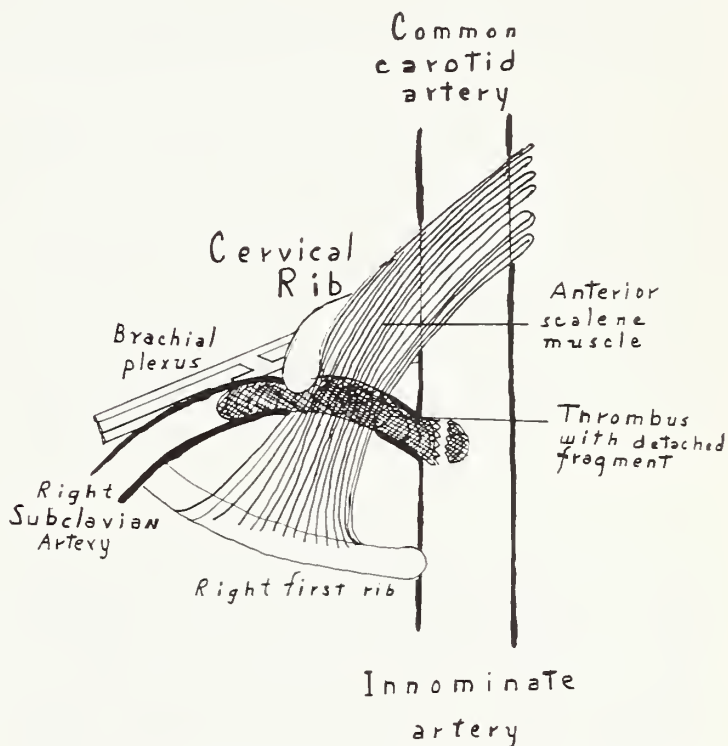


Figure 3. Diagrammatic representation of subclavian thrombosis with propagation proximally giving rise to cerebral emboli.

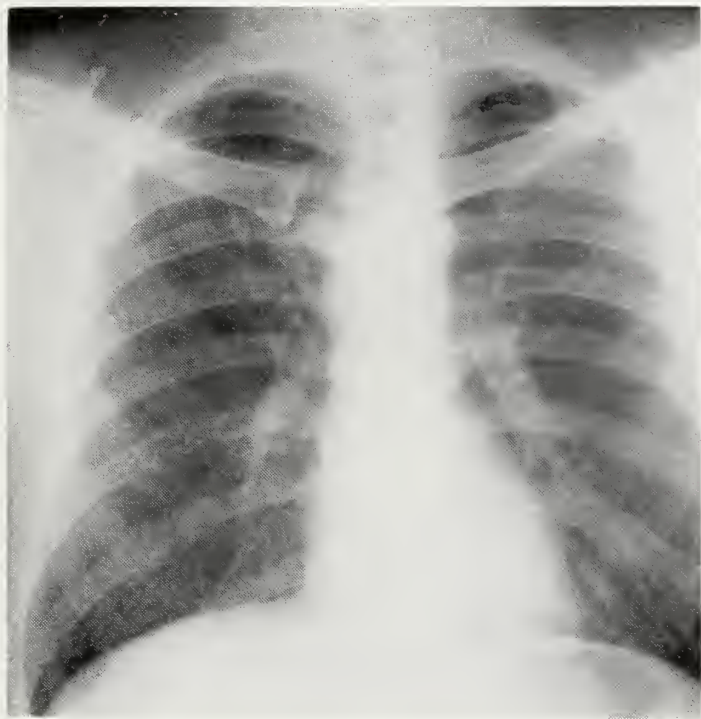


Figure 2. Chest film on same case.

syndrome (Michele),⁷ 7. Raynaud's phenomenon, 8. scleroderma.

Arteriography may be a helpful procedure in localizing the area of compression.

Treatment includes physiotherapy aimed at strengthening the trapezius muscles to help cor-

rect the location of the compression and the pathologic lesion or situation found. These procedures may include division of the scalenus anticus muscle, cervical rib resection, resection of the first thoracic rib,¹¹ thromboendarterectomy, and replacement or bypass graft.

★★★

204 Fourth Ave. (39401)

REFERENCES

1. Adson, A. W.: Textbook of Surgery (Christopher), ed. 5, Philadelphia, W. B. Saunders Company, pp. 560, 1949.
2. Todd, A. W.: Descent of the Shoulder after Birth, Anat. Anz. 44:385, 1912.
3. DeVillers, J. C.: A Brachio Cephalic Vascular Syndrome Associated with Cervical Rib, Brit. M. J. 2:140-144, 1966.
4. Ochsner, A.; Gage, M., and De Bakey, M.: Scalenus Anticus Syndrome, Am. J. Surg. 28:669, 1935.
5. Swank, R. L., and Simeone, F. A.: Scalenus Anticus Syndrome. Arch. Neurol. & Psychiat. 51:432, 1944.
6. Telford, E. D., and Motterhead, S.: Pressure at Cervicobrachial Junction, J. Bone Surg. 30-B:249, 1948.
7. Javid, H.: Compressive Vascular Syndrome of the Neck & Shoulder, Surg. Clin. N. Amer. 50:231, 1960.
8. Neviaser, J. S.: Musculoskeletal Disorders of the Shoulder Region Causing Cervicobrachial Pain, Surg. Clin. N. Amer. 46:1703, 1963.
9. Wright, I. S.: Neurovascular Syndrome Produced by Hyperabduction of Arms, Am. Heart J. 29:1, 1945.
10. Winsor, T., and Brow, R.: Costoclavicular Syndrome. J.A.M.A. 196:697, 1966.
11. Roos, D. B.: Transaxillary Approach for First Rib Resection to Relieve Thoracic Outlet Syndrome, Ann. Surg. 163:354, 1966.

Clinicopathological Conference LXXVIII

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

THIS 57-YEAR-OLD Negro man, a dairy farmer from Southwest Miss., was admitted to the University Medical Center on Nov. 23, 1966. He had been in relatively good health until approximately two months prior to admission, when he developed right chest pleuritic pain, with chills and fever and night sweats. He initially had a cough productive of whitish sputum, but no hemoptysis. He saw his physician approximately six weeks prior to admission here and was treated for one week with a course of parenteral antibiotics.

Lack of improvement prompted admission to the local hospital four weeks prior to his University Medical Center admission. X-rays and physical findings revealed a right pleural effusion. Thoracentesis obtained one quart of bluish fluid, which was negative for malignant cells and bacteria. Following thoracentesis there was symptomatic improvement with a period free of fever. He was treated during this time with intramuscular penicillin injections and was discharged after two weeks.

Ten days prior to University Medical Center admission, there was a recurrence of chills, fever, night sweats, dyspnea on exertion and right pleuritic chest pain. At this time there was no significant cough, and there had been no history of jaundice, hematemesis or melena. There was anorexia, with loss of desire for cigarettes and coffee and a 17 pound weight loss.

Past history and family history were non-contributory, except for the fact that the patient's parents both had diabetes.

Physical examination on admission revealed a temperature of 102 degrees, a pulse of 110/minute, a blood pressure of 118/70 and respirations of 20/minute. He was a well-developed,

well-nourished, moderately dyspneic colored male who appeared chronically ill, but was alert, cooperative and otherwise in no distress. Chest examination revealed decreased fremitus and dullness over the right lower lung region and decreased breath sounds with a tubular quality. No

The patient in CPC LXXVIII is a 57-year-old Negro man who had been in good health until about two months before admission when he developed right chest pleuritic pain, with chills and fever and night sweats. Discussers are Drs. Guy Campbell, Catherine Goetz, William M. Flowers, Jr., and Herbert G. Langford.

rales were heard. The liver was palpable 5 cm. below the right costal margin, and the liver edge was thought to be tender. Otherwise, the physical was unremarkable.

Initial laboratory work revealed a hemoglobin of 11.8 gm. per cent, a hematocrit of 36 per cent, and a white blood count of 6,550. Urinalysis was within normal limits. X-ray of the chest showed a massive right pleural effusion, and the electrocardiogram was within normal limits.

A thoracentesis was performed on Nov. 25, 1966, and 1,150 cc. of straw-colored, blood free fluid obtained with 4.9 gm. per cent protein, a glucose of 76 mg. per cent, and a specific gravity of 1.032. A pleural biopsy was obtained and reported as fibrin and minute fragment of pleura with no remarkable features. Bacteriological study of the fluid was reported as negative, and cytologic study as Class I.

Skin tests for histoplasmosis, coccidioidomycosis, and blastomycosis were all negative, but intermediate strength PPD was moderately positive and the first strength PPD was strongly positive. A repeat pleural biopsy was attempted on Nov. 30, 1966 which showed only the presence of a fibrin clot. The thoracentesis fluid obtained at that time revealed a Class III cytology and cultures for AFB and fungi were again negative.

Bronchoscopy was performed on Dec. 2, 1966, and no pathology was seen. No pathogens were grown on subsequent culture from the bronchial washings, and a Class II cytology was reported on the right bronchial washings. Gastric washings for AFB were negative. Liver function studies showed an elevated bromsulphalein (36 per cent), a reversed AG-radio (3.1/3.6), a slightly elevated SGOT (65 units), and prothrombin activity of 30-50 per cent.

Liver biopsy was done on Dec. 5, 1966, and the tissue obtained was reported to be non-specific granuloma with no evidence of liver tissue. Acid-fast bacillus stains of this tissue were reported as negative. Other laboratory studies revealed normal serum electrolytes, BUN 17 mg. per cent, blood glucose 110 mg. per cent, and serum bilirubin 0.1 mg. per cent.

Other x-ray studies performed were flat plate of the abdomen, gastrointestinal series and barium enema, all of which were reported as normal. An IVP showed a suggestion of a mass at the lateral aspect of the left kidney stretching the middle calyx, but a renal scan was reported to be normal. Liver scan showed patchy distribution over what appeared to be an enlarged liver, interpreted to be compatible with metastatic tumor to the liver. A repeat liver biopsy was performed on Dec. 12, 1966, and subsequently reported normal hepatic tissue.

FEVER BREAKS

Throughout the entire hospital course the patient continued to have daily elevations in temperature of 102 degrees until Dec. 7, 1966 after which he remained virtually afebrile. Four blood cultures were negative. The patient had remained semiambulatory and virtually asymptomatic during afebrile periods and manifested an improved appetite. On the morning of Dec. 14, 1966, the patient developed sudden onset of chest pain with radiation into the abdomen and acute respiratory distress with subsequent prompt respiratory-cardiac arrest. Resuscitation measures were attempted and were unsuccessful.

Dr. Guy Campbell: "I will go through the protocol as I am sure some have not had an opportu-

nity to read it. Today's patient is a 57-year-old Negro man, a dairy farmer, who was admitted to the University Medical Center in November 1966. He considered himself in good health until two months before admission when he developed right pleuritic chest pain, chills, fever, and night sweats. He initially had a cough which was productive of whitish sputum, but he denied hemoptysis.

"He saw his physician two weeks later because of persistence of the symptoms and had a one week course of parenteral antibiotics. (This brings up the point of whether this was streptomycin or penicillin or a combination of the two.) He didn't improve though, and he was admitted to the hospital in his home town one month prior to coming here.

PLEURAL EFFUSION

"X-rays and physical findings at that time were compatible with a right pleural effusion. He had a thoracentesis productive of one quart of bluish fluid. Unfortunately I can't give a differential on bluish pleural fluid, but I just would wonder if this might not have been old dark blood. The fluid was negative for malignant cells and bacteria.

"Following thoracentesis he became asymptomatic or at least showed improvement and was free of fever. He was treated with penicillin and discharged after two weeks of treatment. Several days later he again developed chills, fever, night sweats, dyspnea and right pleuritic chest pain. He denied a significant cough. He became anorexic, and lost 17 pounds. The loss of the desire for cigarettes makes me think of hepatitis. Family history was non-contributory except that both his mother and father had diabetes.

"On physical examination, the patient had fever of 102, tachycardia, normal blood pressure and slight increase in respiration. He appeared chronically ill but was alert and cooperative. Chest examination revealed decreased fremitus and dullness over the right lower lung. Breath sounds were decreased and had a tubular quality. No rales were heard.

"The liver was palpable 5 cm. below the right costal margin and the liver edge was thought to be tender. The presence of a massive pleural effusion makes one wonder whether the liver was actually enlarged or was depressed by the fluid. The remainder of the physical was normal. Laboratory work was normal except for slight anemia. Urinalysis was normal. The only chest film report was interpreted as revealing a massive right pleural effusion. EKG was normal.

"After admission, thoracentesis revealed a large amount of straw-colored, blood free fluid with a

high protein, probably a normal glucose and a high specific gravity. The pleural biopsy reported only fibrin and a minute fragment of pleura with no remarkable features. Bacteriological studies and cytological studies were normal. Skin tests for fungal diseases were negative, but a first strength tuberculin test was strongly positive. A repeat pleural biopsy revealed only a fibrin clot. The thoracentesis fluid revealed a Class III cytology.

"We know that pleural fluid for malignant cells is difficult to interpret and is labeled falsely positive in as high as 10 per cent of cases. No pathogens were grown from bronchial washings. Cytology of the bronchial washings was Class II. Gastric washings for TB were negative. Liver function studies revealed an elevated BSP, a reversed AG-ratio, slightly elevated SGOT and a decreased prothrombin activity. Liver biopsy tissue was reported as showing non-specific granuloma without evidence of liver tissue.

"Dr. Goetz, how often do you see a liver biopsy without seeing recognizable liver tissue?"

Dr. Catherine Goetz: "As I remember, one time before we have seen numerous granulomas like this and no liver tissue at all. However, on this one we thought that this was not liver at all. It probably was something picked up by the needle on the way in."

X-RAY STUDIES NORMAL

Dr. Campbell: "Pleura or lung would be the best possibilities. Acid fast stains on this tissue were negative. Flat plate of the abdomen was normal which makes one wonder if the liver was really enlarged. The GI series and the barium enema were normal. IVP, however, showed a suggestion of a mass at the lateral aspect of the left kidney stretching the middle calyx, but a renal scan was said to be normal. A liver scan showed patchy distribution over what appeared to be an enlarged liver, interpreted to be compatible with metastatic tumor to the liver. A repeat liver biopsy showed normal liver tissue. It is possible to get a biopsy showing normal liver tissue despite considerable metastatic or granulomatous involvement of the liver.

"Throughout most of the hospital course the patient had daily elevations of fever to 102, but after Dec. 7, he became virtually afebrile. Blood cultures were negative. The patient remained semi-ambulatory and virtually asymptomatic during his afebrile periods and even experienced an im-

proved appetite. On the morning of Dec. 14 he developed a sudden onset of chest pain with radiation into the abdomen and acute respiratory distress with subsequent prompt respiratory-cardiac arrest. Resuscitative measures were unsuccessful. I wonder, Dr. Flowers, if you would show us what you have at this time?"

ISOTOPE SCANS

Dr. William M. Flowers, Jr.: "It is difficult to talk about a case involving the chest without any chest films. First, I would like to point out that films demonstrating the right upper quadrant fail to show the right hemidiaphragm or the right lung base. The right kidney is perhaps a little bit lower than it should be. There is a small hump on the lateral aspect of the left kidney, which I suspect is normal. I think this is a dromedary kidney: If this is true, this finding has no significance. This sign can cause discomfort, so we would like to make sure that the kidneys were not grossly diseased.

"I will call the renal scan normal. I have a liver scan which shows absence of activity in the right upper quadrant. The radioactivity was described as 'patchy' in distribution. Patchy distribution usually means insufficient uptake. It means statistical variation of activity. The liver scan should probably be done in more than one view.

"I think it is a treacherous test and one that requires all possible correlation—radiographic, clinical, and otherwise. It is a test that often can show you the site to take a biopsy. It is also a test that can lead you astray. This liver scan would have worried me because a normal scan usually shows more uptake. I do not know why there wasn't more uptake, but such little areas as this are not diagnostic, at least in my more recent experience. However, when this liver scan was interpreted, it was called positive."

Physician: "For what?"

Dr. Campbell: "Metastatic disease."

Dr. Goetz: "Dr. Flowers, when this was read as positive for metastatic disease, did the radiologist mean that this is a diffuse metastatic lesion?"

Dr. Flowers: "I think that that would be overcalling it."

METASTATIC DISEASE

Physician: "What do you see there that makes one think of metastatic disease. I am not quite clear."

Dr. Flowers: "The overall activity of the liver is decreased, and the entire organ is displaced

downward out of the right upper quadrant. There is a corresponding opacity on the radiographs that means there is something displacing it inferiorly and medially. And we don't know where the diaphragm is."

Physician: "A granuloma could give this same picture. A diffuse granuloma."

Physician: "A diffuse granuloma may or may not show anything. If the liver is sufficiently destroyed, you may see uptake by other structures."

Dr. Campbell: "How about cirrhosis?"

Dr. Flowers: "This is the kind of scan that has been called cirrhosis. I think we are asking a lot of this scan to be able to make such a diagnosis, and I think we have expected too much of it in the past. A liver scan will demonstrate gross lesions and with future improvements in techniques we will be able to see even smaller lesions."

Dr. Campbell: "I did ask Dr. Flowers about the left lung. I am also interested in knowing whether anything was seen in the lung after thoracentesis. Did the fluid recur? Dr. Flowers said there was nothing in the left lung, and he didn't know about the subsequent course."

Dr. Flowers: "We don't have the jacket on this patient prior to the barium enema and IVP. We have looked everywhere we can think of."

Dr. Campbell: "For a chest man to discuss a case without chest x-rays is almost sacrilegious. In summary we have a 57-year-old man who was dyspneic and had right pleuritic pain, cough, fever, chills, night sweats, anorexia and weight loss. We know that he had a massive right pleural effusion, abnormal liver function tests, abnormal liver scan, a biopsy of something showing non-specific granuloma. Liver, pleura or lungs are organs that come to mind first. He also had an abnormal IVP with a normal renal scan. He had a normal white count with decreased hematocrit. The GI series and barium enema were said to be normal."

PYELOGRAM FINDINGS

"So three organs are mentioned: the pleura and lungs we will consider as one, the liver and possibly the kidney. I presume that they did the IVP primarily because of the high fever but perhaps they felt something which they didn't describe. His urinalysis was normal. It is my understanding that a cyst could also cause the abnormality noted on IVP. I have been told that if an IVP showed an abnormality due to carcinoma that the renal scan would almost surely be abnormal."

Dr. Flowers: "This is true, but I don't think you can make a differential diagnosis."

Dr. Campbell: "Well, certainly the fever and

night sweats go along with renal disease but we have nothing else to prove or disprove renal disease. How about pathology below the diaphragm? GI malignancy with metastasis to the liver and the lungs is a possibility. However, usually the metastasis to the lungs shows more than a unilateral effusion. In our experience, metastasis from the GI tract to the lungs is not common."

OTHER POSSIBILITIES

"Pancreatic disease is always a possibility. Acute pancreatitis can cause pleural effusion. Usually this fluid is hemorrhagic but not necessarily. Weight loss and anorexia would go with chronic pancreatitis, but we lack sufficient information to be more specific. How about recurrent pulmonary emboli? Many of the symptoms mentioned apparently came on suddenly. Pleurisy, fever, dyspnea, cough are characteristic of pulmonary infarction. However, these effusions are almost always bloody. Hemoptysis was not present but this would not rule out infarction. A massive pleural effusion, however, is quite unusual without better documentation for pulmonary infarction."

"Let's go back to our effusion and pleural biopsy. We know straw-colored fluid is characteristic of tuberculosis but may also be seen in numerous other conditions. Transudates are usually caused by renal, heart, or liver failure, and also myxedema. Straw-colored fluid may be seen in collagen diseases, but the history is not suggestive except for fever. Bloody effusions are primarily seen in trauma, malignancy, pulmonary infarctions, and pneumothorax. The pleural fluid cell count wasn't given, and I would like to make a plea that cell counts be done—not only WBC and differential but the RBC. A high polymorphonuclear count would suggest bacterial infection, pulmonary infarction, subdiaphragmatic abscess or empyema. The predominance of lymphocytes suggest tuberculosis, fungal infections, or collagen disease. We have been interested in pleural fluid eosinophilia and have noted that significant pleural eosinophilia is strong evidence against malignancy, fungal disease, or TB."

"Let's assume that the biopsy was liver tissue showing non-caseating granuloma. An elevated SGOT, prolonged BSP, and an abnormal liver scan are compatible with granulomatous disease of the liver. Endless diseases may produce hepatic granuloma. The diseases may be divided into infectious, hypersensitivity and unknown. Under infection causes are viral, bacterial, fungal and parasitic. Under hypersensitivity reactions we can list sulfonamides. Unknown causes are Wegner's granulomatosis, rheumatoid arthritis, sarcoidosis,

and Hodgkin's disease. Patients with hepatic granuloma usually have an elevated BSP, SGOT, with normal bilirubin. Frequently they also have an elevated alkaline phosphatase which was not mentioned in this case.

"This patient was a farmer and certainly exposed to ticks. Could this be tularemia with a pleural effusion? Tularemia may have caused pneumonia which is hidden by pleural effusion. Possibly his improvement after treatment was related to streptomycin although we do not know that the parenteral injections were streptomycin. How about brucellosis? This patient is a dairy farmer, and brucellosis may produce granuloma of the liver and lung as well as a pleural effusion. Agglutinations were not mentioned, and blood cultures were negative.

"TB may cause hepatic granulomas. Fungal infections could be involved although negative fungal skin tests made this less likely. We have no evidence suggesting hypersensitivity reactions. Sarcoidosis is a possibility. The liver is involved in about 90 per cent of the patients with sarcoidosis but pleural effusion is an unusual manifestation. Absence of bilateral lung disease would also be evidence against sarcoidosis. We have nothing on which to base a diagnosis of Hodgkin's disease.

PLEURAL GRANULOMA

"How about pleural diseases? Most diseases causing granuloma of the liver are capable of causing pleural granuloma. This could be a classic case of tuberculous pleural effusion with granulomas in the liver. Patients presenting with isolated tuberculous pleural effusions have been infected previously. The effusion is caused by a subpleural nodule rupturing into the pleura producing a hypersensitivity reaction and a great outpouring of fluid. Only in about 20 per cent of the cases can we culture the tubercle bacillus from this fluid. However, a needle biopsy increases our diagnostic returns by a classical microscopic picture, a positive tissue smear for acid fast organisms, or positive culture from tissue itself.

"We are not told whether this patient was treated with anti-tuberculous drugs after admission. Such a patient with an isolated pleural effusion should be placed on anti-tuberculous drugs after adequate diagnostic material is obtained—usually four to five days. Perhaps he was. This patient has a strong family history of diabetes.

"Dr. Langford, what is his chance of developing diabetes?"

Dr. Herbert G. Langford: "The story is 100 per cent if you should live so long."

Dr. Campbell: "In the adult male, malignancy is always a prime possibility. Primary malignancy of the pleura is rare. Pleural effusion as a complication of primary or metastatic malignancy is not unusual. In series reporting etiology of pleural effusions about half the cases are due to malignancy. Bronchogenic carcinoma is the most frequent cause but effusions are also seen in metastatic disease from the breast, ovary, and other sites. Lymphoma may occasionally cause pleural effusion. Lymph nodes draining malignant areas may develop non-caseous granulomas, but to my knowledge this is not true of the pleura. If the effusion is due to metastatic disease, I cannot from the evidence list the site of the primary malignancy."

Dr. Goetz: "The protocol doesn't say non-necrotic—it just says non-specific necrosis. It is non-caseating in that respect. These granulomata did have necrosis but we couldn't call it caseating."

Dr. Campbell: "We think of TB as causing caseating granuloma, but they are not always caseating. We recently had a lung biopsy which revealed non-caseating granulomas consistent with sarcoidosis but tubercle bacilli were grown from the biopsy specimen. Multiple biopsies from the liver may reveal both caseating and non-caseating granulomas.

"The massive pleural effusion strongly favors either tuberculosis or malignancy. Why the sudden death? I would guess the patient had a massive pulmonary embolism, but cannot rule out cardiac arrest or a massive myocardial infarction. From the description of acute respiratory distress I favor the embolism. Perhaps I have gun barrel vision, but I feel the patient had tuberculosis involving the lung, pleura, and liver. As the cause of death, I favor pulmonary embolism. As a weak second choice, I will list brucellosis. As a guess, I suppose you will tell me he had a malignancy in the GI tract with metastasis."

Physician: "You are not going to worry about the loss of taste for cigarettes and things like that."

Dr. Campbell: "Well, I don't think he had hepatitis. I most commonly associate this disease with loss of taste for cigarettes. I am sure any kind of toxicity may cause some loss."

Dr. Goetz: "Here is the first biopsy. You notice that there is no recognizable liver tissue at all. Actually, all we see here is a group of granulomas. The necrosis is not marked and it is not caseating. We stained this for fungi and for TB and didn't find organisms in either.

"The next biopsy is that of typical liver tissue with absolutely nothing to call pathological except the ballooning nuclei, which is interesting to me since this man had normal or relatively normal blood sugars. This ballooning of the nuclei in the liver cells is one of the microscopic changes that we use to suspect diabetes."

Physician: "What do you mean by "ballooning"?"

Dr. Goetz: "It is actually supposed to be the nucleus stuffed with glycogen. You see, it looks like a big balloon and you no longer see the intranuclear structure. This is found in diabetics and in persons who have recently had infusions. In adults we take this to be highly suggestive of diabetes. However, in children it is not significant."

"This autopsy was performed by Dr. Davar who found about 2,500 cc. of blood in the peritoneal cavity. We inquired and it seemed that the first attempt was unsuccessful, but on the second go-around liver tissue was obtained. On cut section it was noted that one of the needle tracts actually went into one of the larger vessels of the liver. We assume that the blood in the abdominal cavity was coming from this puncture wound. Unfortunately, however, this man had experienced a massive embolus to his left lung which was the only lung he really had. The right lung was completely collapsed and had a rind about it. This rind was also on the parietal pleura and on the diaphragm. We feel that the first biopsy was of this rind. His left lung was well expanded. There was a slight shift of the mediastinum to the left due to the right pleural effusion and approximately 1,500 cc. of straw-colored fluid."

"His right pleura had granulomata scattered throughout. There were no lesions in the lung proper. After a good deal of looking we were able to find the acid fast bacilli in the pleural lesions and in similar lesions in lymph nodes. We did not grow the organism from material taken either pre- or postmortem. His left lung was in fair condition aside from a bit of emphysema."

Physician: "Had he been treated?"

Dr. Goetz: "No, this was the reason we chose this case for presentation. This Negro man in this hospital for three weeks with fever and night sweats was not treated until the day before death. The mass that was pushing his left kidney over happened to be a hematoma of about 70 cc. of blood and we don't know why he had this. Are there any questions?"

Physician: "Where was the embolus from? Do you presume they came from the legs?"

Dr. Goetz: "We presume they came from the leg although we could not milk out another one."

Physician: "What was the interval between the liver biopsy and death?"

Dr. Goetz: "About 30 hours."

Physician: "Was the blood clotted?"

Dr. Goetz: "It wasn't clotted, but it was mostly blood."

Dr. Langford: "I would submit that during that 24-hour period this fellow must have showed signs of blood loss before he got the acute pain."

Dr. Goetz: "It seems unlikely, but according to the records this man complained to the student that came in of abdominal pain. The student went to get a glove and when he came back the man was dead. I feel that the pain was due to peritoneal irritation by the blood, and that he didn't have time to complain of the embolus."

Dr. Harper K. Hellems: "If a liver biopsy is done, the patient should be followed carefully afterwards. One of the hazards is hemorrhage, and this patient had apparently lost 2,000-2,500 cc. of blood into the abdomen. That is approximately one half of his blood volume. Therefore he must have shown signs of blood loss prior to his death. Presumably this would have been detected by an increase in pulse rate and fall in blood pressure in the hours preceding death. It is quite disturbing that there is no adequate record on these points in the chart and makes the point that frequent recording of pulses and blood pressure should be obtained and recorded for at least 24 hours after liver biopsy."

Dr. Campbell: "When a patient comes in with a pleural effusion and a strongly positive first strength tuberculin test, multiple specimens of sputum and gastric washings should be obtained over the following few days for smear and culture for fungi and tuberculosis. During this time pleural fluid and pleural tissue (obtained by needle biopsy) should be submitted for similar studies as well as for malignant cells. After adequate material is obtained in the first few days, patients should then be placed on antituberculous drugs while other studies (bronchoscopy, scalene node, sputum for Pap studies, liver scar, liver biopsy) are underway to prove a suspected diagnosis of malignancy."

"I think he would have responded well to treatment although we may have had to decorticate him eventually. How much do you think the bleeding itself contributed to his pulmonary embolism? Do you think he might have been near shock and thus more susceptible to an embolism?"

Dr. Goetz: "This embolism would have killed this patient even if his lungs had been in first class condition otherwise. Actually there was nothing anybody could have done to have helped this man if he was going to throw this embolus." ★★★

2500 N. State St. (39216)



The President Speaking

'The Benefit of Our Concerns'

TEMPLE AINSWORTH, M.D.

Jackson, Mississippi

THE HEALTH OF CHILDREN in our public schools has become a matter of increasing concern to practicing physicians and to medical organization. Annually, the American Medical Association conducts a national conference on physicians and schools where these matters are discussed. AMA also sponsors a national committee which works closely with educators and school administrators through appropriate educational organizations. The extent of medicine's concern with problems in school health is evident in recent actions by this committee.

Meeting during the late winter, the AMA committee urged that the dangers of misusing drugs be taught to all children in schools. The committee took note of mounting juvenile arrests for drug offenses and of the dangerous practices of using harmful substances such as glue. The committee recommended that all prospective teachers and school administrators receive professional training in health education and that in-service training programs be offered in the various school districts to supplement and update the education of public school faculty members.

Three other significant actions underscore the need for quality health education. The AMA committee called on all physicians, public health agencies, and others to assist in pursuing a vigorous program on venereal disease education because of its rising incidence among school children. Educators were asked to include direct teaching of health practices in the regular curriculum, and especially did the committee urge education of children on the dangers of health quackery and nostrums.

The new school year offers opportunities to equip our children better in personal health maintenance. Let's take advantage of this opportunity in the interest of seeing that the children have full benefit of our concerns. ★★★



The Vanishing American's State of Health

I

THE UNATONED SIN of America is the plight of her Indians, a British visitor to the United States once wrote. Since that was in 1900, the health state of the American Indian today might raise more than a few eyebrows. The problem itself is difficult to state, because the Indian, by reason of his rich culture and proud heritage, makes much of it for himself. Some tribes just aren't in the 20th century nor do they have any desire to be. Many are enterprising, progressive, and nearly all are willingly industrious.

But traditions are powerful, language barriers are nigh unbreachable, and tribal taboos often mitigate against the Indian's practice of preventive measures which are so much a part of his contemporary's everyday health routine. Generally, the Indian's environment is poor and more often than not, unhealthy by American standards. And even natural enmities between tribes are consideration in health services: A physician residing on a Crow reservation will have little success in gaining the confidence of the Cheyenne, because the tribes have been hereditary enemies for generations.

Since 1955, the United States Public Health Service has been responsible for Indian health when the program was transferred from the Bureau of Indian Affairs. USPHS has made praiseworthy progress in improving the red man's physical state, but it is an uphill task. Despite this progress, some authorities say that the health status of the Indian is 20 years behind that of the

general population. A vivid example is seen where the Public Health Service has been successful in reducing the Indian death rate from tuberculosis by 56 per cent in 12 years. Yet, this death rate today is 700 per cent greater than it is among other Americans.

The American Indian won at the Little Big Horn only to lose the century to follow.

II

Stories about oil-rich Indians who trade their Cadillacs when the ash trays are full may be amusing, but most of these original Americans wouldn't laugh at them at all. With few exceptions, they live on poor land in poorer housing. A survey by the Public Health Service described some of their environmental problems: About half of the Indians live in one or two room dwellings with a mean occupancy of 5.4 persons. Seventy per cent have an unsafe water supply by state public health standards, and 80 per cent have to carry water for a distance of one mile or more.

Not all are as fortunate as the Osage of Oklahoma who really do drive Cadillacs to and from their oil wells or the Ute in Colorado who happen to have a reservation full of uranium. The Menominee of Wisconsin own majestic stands of timber and give Weyerhaeuser some real competition with the tribal lumber mill. In fact, the Menominee tribal council built its own 60 bed hospital, finances health services for the entire tribe, and has a visiting nurse service.

complete appreciation for personal health responsibility. It is to say that there aren't enough.

Early case-finding and treatment are high among the most pressing needs among these peoples. The public health authorities are hard at work with new visiting nurse programs, mobile clinics, health education, and all types of communications programs. But the rich heritage which makes the American Indian a member of his proud culture also threatens to wipe him off the face of the earth. It need not be so, and it must not.—R.B.K.

Gather Round, You Rounders

Who would think that freight trains—standing dead still—are a health menace, but serious researchers are trying to find out what to do with 100,000 worn out boxcars each year. And it's costing the U. S. Public Health Service a tidy \$50,000 to look for the answers.

A research contract has been awarded to Booz, Allen Applied Research of Bethesda, Md., to investigate health problems implicit in old railroad car dismantling and to discover new approaches that will eliminate air pollution problems and still permit practical and economic disposal of the obsolete boxcars.

It really isn't as easy as it sounds. For years, the railroads have been stripping the scrap and re-usable parts and burning the rest. This results in heavy, acrid smoke from the combustion of wood, lubricants, and other combustible materials in the old heaps. Any other technique now in use requires so much labor as to make the process uneconomical.

It's a heckuva way to run a railroad, isn't it?—R.B.K.

Price-fixed, Generic Drugs for Medicare

At least one segment of the American economic community is overwhelmingly opposed to including the cost of prescription drugs under Medicare. The National Federation of Independent Business, actually the largest membership organization of businessmen in the nation, reports

that a poll of its 232,000 businessmen-members turned thumbs down on drugs for Medicare beneficiaries.

Querying its small-business-proprietor-membership, NFIB discovered that 64 per cent were opposed to the drug proposal pending in the Congress. Sponsors are Sen. Joseph Montoya (D., N. M.) and Rep. John Dingell (D., Mich.), congressman-son of the late co-sponsor of the Wagner-Murray-Dingell bill of the late 40's and early 50's. Thirty per cent of the respondents favored the legislation, and 6 per cent said they were undecided.

The returns for Mississippi showed 58 per cent opposed, 37 per cent in favor, and 5 per cent undecided, a response a shade more inclined toward the added benefit than that of the national mean. The most resounding negative came from Alaska where only 17 per cent favored the drug proposal with a hearty 74 per cent opposed and 9 per cent undecided.

Only three of the 50 states and District of Columbia favored enactment of the measures. These are Delaware, New Jersey, and Rhode Island, the latter state giving the bills their best endorsement with 68 per cent of its independent businessmen saying yes. There was a 32 per cent negative and none who were undecided. The Rhode Island vote should come as no surprise, because the state has long sponsored one of the most successful drug programs under its vendor medical care services to the needy.

The bills would pay for prescription drugs after a \$25 deductible had been satisfied. Under such



Copyright 1967, Mississippi State Medical Association

"He needs the kidney transplant and we could throw in the monkey testicles just to humor him."

Don't let monilia cut broad-spectrum therapy short...

start with **Tetrex-F[®]** tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-

spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanel. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

an additional benefit program, the government would also get substantial control over drugs authorized for use, and an approved list or formulary of approved drugs would be published. Generic prescribing would be mandatory.

The bill sponsored by Sen. Long (D., La.) would tighten the program further, if enacted. NFIB interprets the study as reflecting reactions of businessmen to tight money and mounting payroll taxes. The government role in price-fixing drew far more criticism than the basic purpose of providing prescription drugs.

Most state medical associations, including MSMA, strongly oppose any program which denies the physician the professional prerogative of prescribing the drug of his choice in the interest of his patient. Mississippi physicians are almost unanimous in applying this belief to compulsory generic prescribing, too. For the present session of the Congress, most observers agree that the Montoya-Dingell proposal for price-fixed, formulary generic drugs has little chance of enactment. This is as it should be, for American medicine correctly stands for helping those who need help.

Where drugs are concerned in a care-on-need equation, the physician must always be free to choose.—R.B.K.

Cool It, Man

Not all beatniks are bad, according to Dr. Jules Masserman, a psychiatrist, who apparently has scored a first in the literature by classifying the way-out, turned-on generation of weirdos in beards, sweatshirts, and dirty tennis shoes. Dr. Masserman believes that beatnikism may be just another way for a teenager to find groups with similar, sympathetic interests along the road to adulthood.

Classifying beatniks into three basic groupings, Dr. Masserman says that they are often spreading themselves too thin, "trying to be simultaneously a dutiful child, brilliant scholar, winning athlete, popular leader, potent lover, seductive nymph, cynical sophisticate, and a dozen other incompatible alter egos." The groups are these:

Up-beatniks: The best of the lot, says Dr. Masserman, who is professor of psychiatry at Northwestern University School of Medicine at Evanston, Ill. The up-beatnik, even with the beard or long straight tresses, play-reading, placards, proclamations, and protest marches is "basically earnest, energetic, intelligent, and well-intentioned."

Down-beatniks: Not so good, infers Dr. Masserman. They are articulate in condemning the inequalities and injustices of society and may be strident and obnoxious in their speech. Even so, the outlook for their rehabilitation can be favorable. Dr. Masserman, an apparent optimist, says that down-beatniks, with further maturity and increasing wisdom, can "become good citizens, competent parents, and sometimes even staunch Republicans."

Off-beatniks: Worst of the lot, opines the psychiatrist. These are the seriously erratic, troubled, and troublesome misfits. Despite their pretensions, they contribute little that is constructive to our culture.

Dr. Masserman sums up his case by pointing out: "The dividing line is this: When an adolescent becomes so immersed in extracurricular activities as to neglect his education, physical health, and broader social development, or when he advocates 'sports' that endanger others, such as drag racing, or when he promotes public obscenity, sexual arrogance, and physical violence, or experiments with excessive amounts of alcohol or drugs, then therapy is necessary."

In defense of beatniks, it should be observed that there are some four-letter words which even they refuse to utter. These are "work," "soap," "bath," and "tidy." It's way out there and cool, man, real cool.—R.B.K.



PERSONALS

MYRON L. ARRINGTON, DAVID B. DALE, FRANK L. LEGGETT, KENNETH D. TERRELL, and NELSON O. TYRONE of the Jefferson Davis County Hospital staff were honored by the citizens of Prentiss on the recent Doctors' Day observance.

GUY D. CAMPBELL of Jackson has been installed as president of the Mississippi Tuberculosis Association. ROBERT E. SCHWARTZ of Hattiesburg was named national director from Mississippi at the annual meeting.

I. P. CARR of Clarksdale was the special honoree of the Woman's Auxiliary to the Clarksdale and Six Counties Medical Society on Doctors' Day. He is an Emeritus member of the association.

ROBERT E. CARTER of Jackson, dean and director of the University Medical Center, was honored at a welcome dinner sponsored by the Jackson

Look how many ways

Thorazine®

brand of

chlorpromazine

can help

	Tranquillizer	Potentiator	Antiemetic
Agitation	●		
Alcoholism	●		●
Anxiety	●		
Cancer patients	●	●	●
Severe neurodermatitis	●		
Drug addiction withdrawal symptoms	●		●
Emotional disturbances (moderate to severe)	●		
Nausea & vomiting	●		●
Neurological disorders	●		
Obstetrics	●	●	●
Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
Surgery	●	●	●
Tetanus	●	●	

'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. **Contraindications:** Comatose states or the presence of large amounts of C.N.S. depressants. **Precautions:** Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. **Side Effects:** Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with

I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories 

PERSONALS / Continued

Chamber of Commerce and attended by the board of directors and Committee on Medical and Dental Affairs. WALTER H. SIMMONS of Jackson, chairman of the committee, presided at the dinner.

JACK Q. CASH has announced the opening of his offices at 203 South Panola Street in Senatobia. He relocated in Mississippi after practicing 12 years in Corning, Ark.

H. VANN CRAIG has joined W. HOWARD KISNER in the practice of general surgery at Natchez. Their professional offices are located at 49 Sergeant S. Prentiss Drive.

JOHN F. ECKFORD was honored by the citizens of Starkville April 12 which was the 40th anniversary of his establishing his practice there. The city's board of aldermen designated the occasion as Freddie Eckford Day.

FRANK B. HAYES of Columbus was installed as president of the Mississippi Thoracic Society during its 1967 annual meeting at Jackson. Other officers are DWIGHT S. KEADY of Sanatorium, vice president; JOHN F. BUSEY of Jackson, member of the American Thoracic Society Council; T. K. WILLIAMS of Jackson, member of the executive committee; and THURMAN T. JUSTICE of Gulfport, past president.

HENRY J. KELLUM, JR., and E. E. BRAMLITT of New Albany have been elected to terms of service on the board of directors of the Oaks Country Club. Each will serve for three years.

JOHN F. RUSSELL of Gulfport has been named president of the Harrison County Chapter of the Arthritis Foundation.



NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

CAMPBELL, MIKE CARROLL, JR., Batesville. Born Grenada, Miss., Aug. 26, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned U. S. Naval Hospital, Charleston, S. C., one year; elected April 6, 1967, by North Mississippi Medical Society.

CRADDOCK, CULVER CARTER, Greenville. Born Memphis, Tenn., Nov. 13, 1930; M.D., University of Tennessee College of Medicine, Memphis, 1959; interned Methodist Hospital, Memphis, Tenn., one year; residency, Baptist Memorial Hospital, Memphis, Tenn., three years; elected April 12, 1967, by Delta Medical Society.

HARMON, ROY FRANKLIN, JR., Houston. Born Houston, Miss., April 8, 1929; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned John Gaston Hospital, Memphis, Tenn., one year; general surgery residency, University of Arkansas School of Medicine, Little Rock, four years; elected March 13, 1967, by Northeast Mississippi Medical Society.




DEATHS


ARCHER, JOHN GEORGE, Greenville. M.D., University of Pennsylvania School of Medicine, Philadelphia, 1916; direct lineal descendant of Dr. John Archer, first medical graduate from a U. S. school in 1768; interned Episcopal Hospital, Philadelphia, Penn., and the Methodist Hospital, Philadelphia, Penn.; postgraduate training at the Physiatrie Institute, Morristown, N. J., Cornell University Medical College, N. Y., Tulane University School of Medicine, New Orleans, La., and St. Louis School of Medicine, Mo.; Fellow, American College of Physicians, the American College of Cardiology, and the Memphis Academy of Internal Medicine; member, Mississippi Society of Internal Medicine, Mississippi Heart Association, Southern Medical Association, and the Mid-South Post-Graduate Medical Association; former Vice President and President of the Delta Medical Society; former Trustee and Vice Chairman, Board of Trustees, and past President of the Mississippi State Medical Association; member, MSMA Fifty Year Club; incumbent President, American Cancer Society, Mississippi Division; died April 19, 1967, aged 75.

COLQUITT, SAMUEL WALTER, Pine Bluff, Ark. M.D., University of Arkansas School of Medicine, Little Rock, 1912; Emeritus member of MSMA and member of the Fifty Year Club; died April 4, 1967, aged 80.

MOORE, DUDLEY ROOK, Byhalia. M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1912; former President of the North Mississippi Medical Society; Emeritus

member of MSMA and member of the Fifty Year Club; died April 9, 1967, aged 79.

 RILEY, FRANKLIN GAIL, Meridian. M.D., University of Tennessee College of Medicine, Memphis, 1915; member, American Academy of Pediatrics; member MSMA Fifty Year Club; diplomate of the American Board of Pediatrics; Emeritus member of MSMA; died April 5, 1967, aged 80.

 TRIGG, DANIEL, Greenwood. M.D., St. Louis University School of Medicine, Mo., 1947; interned St. John's Hospital, St. Louis, Mo., one year; internal medicine residency, Ochsner Foundation Hospital, New Orleans, La.; pathology residency, Ochsner Foundation Hospital, New Orleans, La.; member, American College of Pathologists; diplomate, American Board of Pathology; died April 16, 1967, aged 45.

State Records Lowest Birthrate in History

The Mississippi State Board of Health has released vital statistics on the state's population for 1965 with publication of the new red and white volume in April. It is the 23rd consecutive annual tabulation published from records of births, deaths, marriages, and divorces.

Most dramatic development is the decline in live births, the greatest for any year previously on record. The compilation shows a drop of 9.7 per cent in live births with 1965 going to 51,171 from the 1964 total of 56,650. While the downward trend in births is nationwide, the Mississippi rate exceeds that of the nation by about 20 per cent.

The white birthrate of 17.4 for the year was the lowest in 53 years of record. Only 23,369 white children were live born. For nonwhites, the rate was 28.2 for a total of 27,802.

A slight improvement was noted in hospital deliveries for nonwhites with the 1965 rate being 58.8 per cent over the previous year's 56.1 per cent. There was no change in the white rate of 99.4 per cent.

Diseases of the heart continued to lead the list of causes of death with 31.1 per cent. Vascular lesions, malignant neoplasms, and accidents were respectively the second, third, and fourth leading causes. Homicide squeezed into the 10 leading causes with 259 deaths for a 1.1 per cent rate. Accidents still head the list of causes of pediatric deaths with cancer running second.



FUTURE CALENDAR

September 12

THE THYROID AND RELATED PROBLEMS

This seminar will begin with a detailed review of the anatomy, physiology, and pathology of the thyroid gland. Medical and surgical aspects of hyperthyroidism will also be discussed. Additionally, the relation of thyroid function to problems in gynecology and in pregnancy will be considered. Other topics to be included are tumor of the thyroid, radiologic aspects of thyroid problems and hypothyroidism.

September 22

CURRENT PRACTICES IN THE MANAGEMENT OF BILIARY TRACT PROBLEMS

Guest speaker for this symposium will be Dr. Frank Glenn, Professor of Surgery at Cornell University, who is one of the most knowledgeable teachers in American surgery concerning biliary tract problems.

October 12-14

ARTHRITIS SEMINAR

A three-day program is to be presented under the auspices of the Mississippi Chapter, Arthritis and Rheumatism Foundation and The University of Mississippi School of Medicine.

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRACTICE

October 27

SEMINAR FOR NURSE ANESTHETISTS

November 10

SYMPOSIUM ON HAND INJURIES

November 17

SEMINAR ON ANEMIA

December 8

CARDIOPULMONARY RESUSCITATION

December 14

MODERN MANAGEMENT OF COMMON OBSTETRICAL COMPLICATIONS

January 5, 1968

OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE

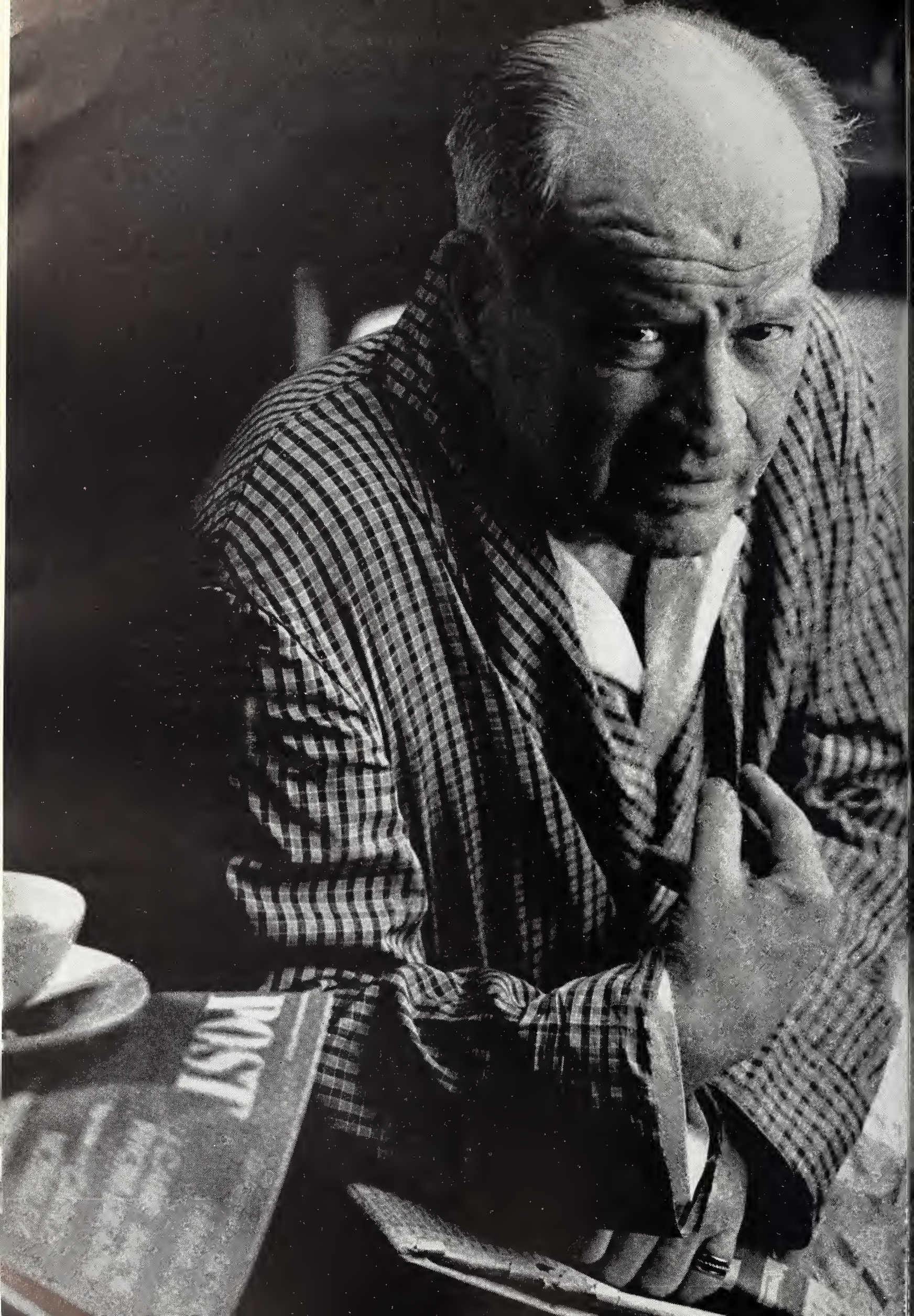
January 25, 1968

ALIMENTARY TRACT PROBLEMS

February 1, 1968

UMC DAY

March 8, 1968



I'm supposed to get up and do things?

With my heart?

It's entirely natural—and may even be desirable—for the cardiovascular patient to be somewhat anxious about himself.

But when anxiety leads to unreasonable self-imposed limitations and restrictions . . . when it aggravates cardiovascular symptoms . . . when it interferes with restful sleep, measures to help alleviate the anxiety are probably in order.

One measure, of course, is reassurance. Another, adjunctive measure, is EQUANIL (meprobamate).

Over a decade of experience has shown that EQUANIL (meprobamate) is generally well tolerated as well as effective. Side effects are usually limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose

should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

American Hospital Formulary Service Category No. 28:16.08

A quality controlled product of
Wyeth Laboratories Philadelphia, Pa.

to help relieve anxiety and tension occurring
alone or secondary to organic disease

Equanil[®]
(meprobamate)



State Morbidity Reported Through April 21

The Mississippi State Board of Health reports the following occurrence of morbidity for 1967 through the 16th week of the year, ending April 21. Case totals are shown opposite the disease condition.

Tuberculosis, pul.	223
Tuberculosis, O. F.	17
Salmonella infections	10
Hepatitis, inf.	136
Dysentery, bac.	12
Helminthic infections	
Hookworm	289
Ascariasis	212
Strongyloides	19
Mononucleosis, inf.	21

Septicemia, staph.	1
Meningitis, men.	6
Meningitis, O. F.	9
Mumps	253
Measles	581
Chickenpox	141
Influenza	500
Strep infections	
Strep throat	990
Scarlet fever	40
Malaria, vivax	1
Tetanus	2
Syphilis	
Early	153
Late	47
Gonorrhea	1,680
Rabies in animals	
Bats	2



Vacation trip....

Motion sickness?



This time it'll be different. Emetrol taken before the trip begins will usually prevent nausea and vomiting. Emetrol is effective and safe...most helpful where safety is most important. It acts locally—not systemically.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

Emetrol®
phosphorated carbohydrate
solution
emesis control



Book Reviews

Human Development. Edited by Frank Falkner, M.D., M.R.C.P. 644 pages with illustrations. Philadelphia: W. B. Saunders and Company. \$20.00.

Frank Falkner, M.D., M.R.C.P., has edited the most unusual and interesting collection of essays under one major heading it has been my privilege to read. The subtopics contributed by 29 separate authorities are intimately related to the main subject. The whole text is of timely importance to the general family physician as well as the pediatrician and the teacher of medical subjects. The text should be of special interest to the specialist who is concerned with why certain phenomena are present in a given circumstance.

To the teacher of science related to biologic development as a whole or in special areas covered by the 19 individual chapters the book should be of prime interest. This publication should have obvious appeal for medical students, interns, residents, as well as the investigator, and the experienced practitioner. The embryologist, the physiologist, the psychologist, the anatomist, the psychiatrist and even the minister will find material of vital interest to them in the various chapters.

This book should be recommended reading for all individuals concerned with human development and behavior.

H. C. RICKS, M.D.

Hearts: Their Long Follow-Up. By Paul Dudley White, M.D. and Helen Donovan. 357 pages with illustrations. Philadelphia: W. B. Saunders Company. \$12.00.

This is a most delightfully written book covering the commoner types of heart disease. Its focus is entirely on long term survival by an expert cardiologist reporting on his own careful personal observations. Essentially, the book consists of a multitude of summarized records of Dr. White's own patients managed by him over a period of some 50 years. This method of presentation, while making for easy reading is, as suspected by

Dr. White, "at times boring to the reader" but to have done it otherwise would probably have detracted much.

In all honesty, I seriously doubt that this book will contribute very much to the field of present-day cardiology except perhaps to offer maturity in judgment to those of us who, because of lack of Dr. White's many years of experience, might be prone to arrive at incomplete conclusions regarding heart disease from short-term study of patients over periods of weeks, months or even a few years. However, I suspect that most who read the book would agree that the cases cited represent the exceptions rather than the rule.

Reading the case histories presented, especially of the long-term survivors of rheumatic heart disease, hypertensive and coronary heart disease proved comforting to this reviewer and should be consoling to others who are reluctant to succumb to the pressures of some of the present-day proponents of experimental surgical procedures, particularly in the realm of coronary re-vascularization.

All in all, I would classify this book as a mature, easily read work with an abundance of sober philosophy, written in a style so characteristic of one of the world's most famous cardiologists, which can not help but enrich the reader's cardiologic acumen.

WILLIAM H. ROSENBLATT, M.D.

AMA Co-sponsors Dandruff Symposium

A special joint meeting co-sponsored by the American Medical Association's Committee on Cutaneous Health and the Toilet Goods Association was conducted at the Waldorf-Astoria Hotel in New York last month. Subject of the meeting was seborrhea and seborrheic conditions.

Speakers included prominent dermatologists and researchers with a prominent role being played in the program by scientific staff members from the Colgate-Palmolive Co.

Rising Care Costs Is Attributed to Hospitals

The cost of medical care in the United States rose 7 per cent from January 1966 through January 1967, according to the Bureau of Labor Statistics which compiles the nation's economic yardstick, the Consumer Price Index.

Most other items on the CPI rose only half as much as medical care, spokesmen said. Examples of higher cost items are public transportation, 6.4 per cent; restaurant prices, 5.5 per cent; shelter, 4 per cent; clothing, 3.7 per cent; and furniture, 3 per cent.

Low risers included private transportation, 1.6 per cent, and rent, 1.5 per cent. The overall rise in all goods and services was 3.3 per cent.

By far, medical cost increases are mostly in hospital care. At the end of 1966, the mean per day hospital cost per patient was over \$49 and

Labor Department spokesmen say it will exceed \$58 per day in 1967.

The per patient day cost in hospitals is forecast to go to \$67 in 1968, to \$77 in 1969, and to about \$90 in 1970. At the latter figure, a hospital insurance policy conceivably could cost a single individual from \$800 to \$1,000 per year.

Lilly Offers New Cordran Package Size

Half-strength Cream Cordran® (flurandrenolone, Lilly) and half-strength Ointment Cordran have been introduced by Eli Lilly and Company in new 30-Gm. package sizes for economy in the maintenance therapy of chronic or widespread dermatoses susceptible to the corticosteroid's action.

Cream Cordran, Half Strength, 0.025 per cent (No. 9), and Ointment Cordran, Half Strength, 0.025 per cent (No. 79), are now supplied in 30- and 60-Gm. tubes and in 225-Gm. jars.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761



Dr. Ainsworth Inaugurated President; Dr. Rogers Is Acclaimed President-elect

Delegates to the pace-setting 99th Annual Session named Dr. Joseph B. Rogers of Oxford president-elect of the Mississippi State Medical Association by acclamation and inaugurated Dr. Temple Ainsworth of Jackson as the 1967-68 president. A new registration record of 1,014 for the Gulf Coast was tallied.

In his address to the opening meeting of the House of Delegates, Dr. James T. Thompson of Moss Point, called for enactment of a realistic, medically-oriented Title XIX program for the state, urging that the state end its fragmented, shotgun approach to medical care for the indigent.

Reaffirming the association's historic stand for free choice and privately provided care, he said that we are "not asking that the organization of health care services be rebuilt along other lines and philosophies," but rather, "We are asking if we are sufficiently sound in our traditional distribution patterns to make them do a better job for more people."

Dr. Thompson said that "we are the witnesses to a vital era when the socioeconomics of medicine

is changing to match progress in medical science."

Pointing out that "almost no practical, realistic man can hold as tenable the growing gap between scientific capability and delivery capacity," he declared that "one way or another, this gap is going to be closed."



AMA President-Elect Milford O. Rouse addresses the House of Delegates as Speaker Howard A. Nelson presides.



The historic gavel goes over to President Temple Ainsworth, center, from Past President James T. Thompson, right, as President-Elect Joseph B. Rogers joins in ceremonies.

The president said that "this is a challenge for change, and I believe that he who fails to respond to the challenge will not be a factor in the change."

The House of Delegates approved the proposal with a standing ovation and praised Dr. Thompson's services as president.

At the opening meeting, Dr. Milford O. Rouse of Dallas, president-elect of the American Medical Association, addressed the delegates as the princi-



Members of the Fifty Year Club, including "freshmen" elected in 1966, were honored at a special luncheon. Left, Drs. Ben L. Crawford, Jr., and John B. Howell, Jr., chairman of the Board of Trustees, greet friends at Ole Miss reunion. Right below, President Thompson presents Ole Miss Chancellor J. D. Williams with a special recognition plaque.





The Drs. Dennis and Mary Ward are officially registered by staff members McGuffee, Cousens, and Day. Lower left, Dr. Frank M. Acree, Jr., holds 1967 Robins Award after presentation by Willard L. Duvall, Robins district manager, and President Thompson. Lower right, guests, Drs. William Clement and John G. Forshner of New Orleans, view scientific exhibits.





Could it be
something
more than
growing
old that
“gets her
down”?

ild mood depression,
poor appetite, little
interest in the present or
future. Does this picture
mean that she's giving in
to functional fatigue?
When functional fa-
tigue is part of her prob-
lem, Alertonic can help
counteract accompanying
apathy and inertia. It
helps lift mood, stimulate
appetite, and establish
new interest in daily life.

Pleasant-tasting Alertonic combines pipradrol hydrochloride—a gentle cerebral stimulant—with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

*Adequate dosage is important: Prescribe Alertonic—
one tablespoonful t.i.d., 30 minutes before meals
...tastes best chilled.*

*And for your patient's sake, prescribe Alertonic
in the convenient, economical one-pint bottle.*

Available only on prescription
Alertonic®

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%, pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B₁) (10 MDR*), 10 mg.; riboflavin (vitamin B₂) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B₆), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

ORGANIZATION / Continued

pal guest speaker of the annual session. Dr. Francis L. Land of Washington, special medical consultant for Title XIX, also addressed the House.

Named to the posts of vice president were Drs. Ashford H. Little of Oxford, C. G. Sutherland of Jackson, and Richard J. Field, Jr., of Centreville.

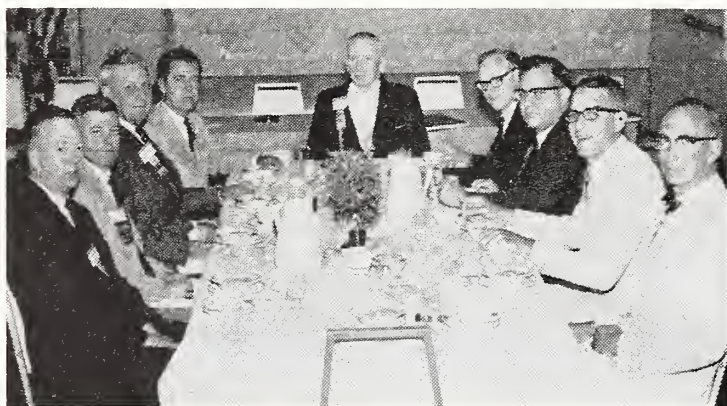
Dr. Walter H. Simmons of Jackson was elected secretary-treasurer, succeeding Dr. James L. Royals, also of Jackson, who was named vice speaker.

Dr. William E. Lotterhos of Jackson was elected speaker of the House, succeeding Dr. Howard A. Nelson of Greenwood who takes his seat this year as delegate to AMA.

Dr. J. T. Davis of Corinth was re-named to the Board of Trustees for district 3. Dr. John M. Alford, Jr., of Greenwood was elected to the district 1 post on the Board, and Dr. James O. Gilmore of Oxford succeeded Dr. Rogers, the new president-elect, in the district 2 seat.

Dr. G. Swink Hicks of Natchez won the other AMA delegate seat, succeeding Dr. J. P. Culpepper, Jr., of Hattiesburg who announced his retirement after 16 years in the AMA House which included terms on the Board of Trustees and as AMA vice president.

Other elected or re-elected officials were Drs. B. B. O'Mara of Biloxi, alternate delegate to AMA; Thomas W. Wesson of Tupelo, associate



The Committee on Medicine and Religion plans for 1967-68 at a breakfast meeting. Clockwise are AMA staffers Etheridge and Strobhar, President Thompson, Speaker Nelson, Chairman Bailey, UMC Associate Dean Gronvall, and committee members Martinolich, Alford, and Julian Wiener.

editor; Daniel L. Hollis of Biloxi, Council on Budget and Finance; and R. Mayo Flynt of Meridian, Council on Medical Education.

Named also to councils were Drs. Arthur E. Brown of Columbus, Constitution and By-Laws; to the Council on Legislation, Drs. Paul B. Brumby of Lexington, George E. Twente of Jackson,

and Guy T. Vise of Meridian; and to the Judicial Council, Drs. J. P. Culpepper, Jr., of Hattiesburg, Leo J. Scanlon, Jr., of Natchez, and James T. Thompson of Moss Point.

Newly named Council on Medical Service members included Drs. C. R. Jenkins of Laurel, Jack A. Atkinson of Brookhaven, and Bedford F. Floyd, Jr., of Gulfport.



President Thompson, right, appears before the Reference Committee on Reports of Officers and Board of Trustees. Committee members are, from the left, Drs. S. Jay McDuffie, Victor E. Landry, Chairman Everett Crawford, Eldon L. Bolton, and Samuel B. Caruthers. At lower right are heads of Trustees C. D. Taylor, Jr., and John B. Howell, Jr.

The four day May 15-18 meet was headquartered at the Buena Vista hotel and motel. Five alumni groups and 15 specialty societies met concurrently.

House of Delegates Acts on Big Agenda

Acting on a heavy agenda of annual and supplemental reports and seven resolutions, the House of Delegates conducted lengthy meetings on May 15 and 18, devoting time also to reference committee hearings.

Spirited debate was heard over the issues of Blue Shield and continuation of the controversial Emergency Medical Service Unit at the state capitol. Other major actions included Title XIX, expansion of the Central Office Headquarters Building at Jackson, physician representation on hospital governing boards, occupational health programs in small plants, Medicare, doctor draft, and the site of the annual session.

In a report of actions pending on Blue Shield, the Board of Trustees reported on liaison with the plan's officials and the charges given by the House of Delegates in 1966 when the Board asked for a



Ole Miss all, except UT grad James T. Thompson on left. They are UMC Dean Robert E. Carter and Associate Dean John A. Gronvall, 1967 Medical Alumni President E. E. Ellis, 1966 President T. E. Wilson, Chancellor J. D. Williams, Alumni Association President Howard A. Nelson, and Reunion Chairman B. B. O'Mara. Counter clockwise from bottom, 1967-68 Auxiliary President Mrs. David L. Clippinger addresses the House, Dr. W. O. Barnett receives the Aesculapius Award from Scientific Chairman James L. Royals as Dr. Ainsworth observes, and Dr. Ainsworth takes oath of office administered by Board Chairman Howell as Executive Secretary Rowland B. Kennedy holds association's Bible.



ORGANIZATION / Continued

year in which to work with the plan for improvements.

The Board reported that "a more equitable distribution of plan benefits has . . . not been achieved nor has there been an increase in Blue Shield benefits to a more realistic level."

The Board said that it "is not satisfied with the accomplishments realized in the time granted by the House" and recommended withdrawal of association approval of the plan for Blue Shield. The trustees also recommended that the association apply for a charter and use of the Blue Shield symbol and implement a plan under association auspices when feasible.

Lively debate was heard in the reference committee among more than 40 persons speaking on Blue Shield. The report of the reference committee, which endorsed the Board of Trustees' recommendations, was debated on the floor of the House. Delegates voted 47 to 24 for an amended version of the reference committee's report which recommended that "the House of Delegates of the Mississippi State Medical Association withdraw its approval of the Mississippi Hospital and Medical Service as a Blue Shield plan, if further improvement is not forthcoming.

"We further recommend," the report as adopted continued, "that the association authorize the Board of Trustees to proceed to apply to the National Association of Blue Shield Plans for a char-



1966-67 Auxiliary President Dees, right, greets VIP's, who are, from left, Mrs. Asher Yaguda, AMA Auxiliary president; Mrs. Jack Campbell, Mississippi Nurses Association vice president who was the featured luncheon speaker, and Mrs. C. Tolbert Wilkerson, Southern Medical Association Auxiliary president.

ter and use of the Blue Shield symbol and proceed to implement a program when feasible under the auspices of the Mississippi State Medical Association if we do not receive further improvements."

The action also provided for the association to "continue to offer to furnish 12 physician-directors to the plan for Blue Cross."



New officers of the Woman's Auxiliary are, from the left, Mesdames David L. Clippinger, president; Herman E. Kellum, president-elect; J. Gordon Dees, outgoing president and new first vice president; Ralph

Sneed, third vice president; H. H. McClanahan, Jr., fourth vice president; T. E. Ross, recording secretary; and T. A. Baines, historian.



State association past presidents pause for photo before their traditional breakfast. Seated from left are Drs. Guyton, Anderson, Street, Ainsworth, James T. Thompson, Ricks, and Wilkins. Standing from left

are Drs. Crawford, Crenshaw, Hicks, James G. Thompson, Hill, Bailey, O'Mara, Nelson, Vise, Long, and Arrington.

Continuation of the Emergency Medical Care Unit for the legislature was opposed by the Council on Budget and Finance and the Board, but the project was continued by a split vote of the delegates after debate on the floor.

- In other actions, the House of Delegates:
- Adopted a six point positive policy on Title XIX, approving the program and urging enactment of implementing legislation.
- Authorized the Board of Trustees to expand the Central Office Headquarters Building after

consideration of bids and awarding of contracts.

—Recommended that each hospital have at least two physicians as voting members of the governing board, the two to be chosen by the medical staff.

—Approved a special study of occupational health programs in small plants and a new policy on such programs.

—Asked physicians to report to the association in writing any adverse experience with Title XVIII for over-65 Medicare beneficiaries and authorized a survey on the program.

—Called for support of the AMA proposals on doctor draft giving American medicine a stronger voice in the medical manpower picture.

—Voted to conduct the 100th Annual Session at Jackson but to conduct succeeding meetings at the Gulf Coast until Jackson improves convention facilities.

—Funded the new Auxiliary newspaper, "Dis-taff," with up to \$500 annually.

—Praised the work of President James T. Thompson and warmly commended Secretary-Treasurer James L. Royals and Speaker Howard A. Nelson.

—Concurred in admission of alcoholics to hospitals as patients with medical problems and asked for ABC tax monies to support treatment facilities for these patients.

—Encouraged component medical societies to bill for MPAC and AMPAC dues as voluntary



President Thompson hosts reception for technical exhibitors, exchanging greetings with Syntex Representative Dewey Long.

ORGANIZATION / Continued

and non-tax deductible along with regular medical organization dues.

—Requested continuation of the teaching program project in related hospitals with the University Medical Center.

—Sought establishment of a Mississippi Commission on the Medical Aspects of Sports.

—Petitioned AMA to establish healing in the *Principles of Medical Ethics* as the central aim and aspiration of the association.

—Gave the AMA delegates a resolution urging continuation of the AMA group insurance program as initially organized and constituted.

—Rendered tribute to the late Hon. Walter Sillers for his work in behalf of medicine in half a century of service in the legislature.

—Recommended that specialty societies in pathology and radiology consider carefully the impact of billing practices as they now exist and the possibility of revising methodology for resolving problems in this regard.

HRET Publishes Book on Manpower Shortage

Programmed Instruction and the Hospital, the first book describing the application of this new method of instruction to hospitals, was released recently by the Hospital Research and Educational Trust.

The 151-page book is the published report of a three-day conference of top industry, education, government, and health care experts who examined programmed instruction as a new way of offsetting intensifying health manpower shortages.

The conference was conducted by the Trust, an affiliate of the American Hospital Association, in cooperation with Teachers College, Columbia University.

Dr. Ross Is Honored for Community Service

Dr. T. E. Ross, Jr., was honored by the Hattiesburg Kiwanis Club and his home community in recent ceremonies taking the theme of "This Is Your Life." He has been a Kiwanian for 45 years and is a charter member of the Hub City club.

Judge Stanton Hall, president of the club, presided over the special occasion, and prominent Hat-

tiesburg citizens participated. Dr. Ross' civic, military, and medical careers were reviewed by participants in the occasion. In addition to the Kiwanis 45 year pin, he was presented with the Legion of Merit for club and community service.

Dr. Ross has served as a member of the as-



Dr. T. E. Ross, Jr., sits in a special place of honor as he is feted by the Hattiesburg Kiwanis Club for 45 years of community service. Judge Stanton Hall, club president, conducts the occasion.



**Jefferson House
Convalescent Center**

represents a new approach to medical care. Why? Because Jefferson House is a *convalescent center*—one of the first such institutions in the South—especially designed, equipped, and staffed to provide active restorative care for the convalescing patient, the individual on the road to recovery.

If you have a patient who's between hospital and home, look into Jefferson House. Write the Director, 1800 Jefferson Highway, New Orleans, Louisiana 70121.



sociation's Council on Medical Service, the House of Delegates, and many key state-level committees. He has been president of the Mississippi Chapter of the American College of Surgeons.

Additionally, he is the incumbent chairman of the William Carey College Board of Trustees and a member of the board of directors of the Mississippi Hospital and Medical Service.

Dr. Scanlon Is Candidate for Coroner

Dr. Leo J. Scanlon, Jr., of Natchez has announced that he will be a candidate for coroner of Adams County, subject to the Democratic primary August 8. If elected, he will be the first pathologist in Mississippi to hold a coroner's post.

The Mississippi native has practiced in Natchez for six years. He is chief of pathology and director of laboratories at the Jefferson Davis Hospital. Dr. Scanlon received his premedical education at Ole Miss and his medical degree from the University of Pennsylvania School of Medicine. He was a resident at the University Medical Center.

Dr. Scanlon was inaugurated president of the Mississippi Association of Pathologists at the 99th Annual Session two weeks ago. For a number of years, he has served as the delegate from Adams County to the state association's House of Delegates.

The 38 year old pathologist is a former Air Force officer who served overseas with the Strategic Air Command during the Korean War.

HII Reports State's Health Insurance Coverage

More than 1.3 million Mississippians of the state's estimated total population of 2.3 million have some form of health and medical insurance coverage. This was the statement of James R. Williams of New York, vice president and general manager of the Health Insurance Institute.

Williams said that "a high level of health insurance protection has been reached in the state of Mississippi." Data released were for 1965, the most recent year for which complete figures are available.

The HII data are for net insureds with duplicate coverage eliminated, Williams said. Coverage by licensed private insurance companies in the state

is in a majority by a 3-to-2 ratio over voluntary prepayment and group practice plans, he added.

Hospital expense coverage included 1.3 million Mississippians, while over 1.2 million had surgical coverage. A wide gap exists in medical coverage with only 794,000 having this protection. Only about 10 per cent of the population has major medical expense coverage.

The 1965 benefits were reported as totaling \$53.8 million with insurance companies paying out almost \$32 million. The voluntary prepayment and other plans paid out almost \$22 million, the report states.

Insurance studies showed that the typical patient stayed 6.3 days in the hospital and incurred a bill of \$214.77 for hospital services. Hospital costs are known to have risen substantially since this reporting with the upward movement of the general economy and the impact of the minimum wage law.

ACS Wants Physicians on Hospital Boards

The Board of Regents of the American College of Surgeons joined a growing majority in American medicine who insist that physicians be voting members of hospital governing boards. The elite specialty society's policy-making body announced its decision last month.

"Members of the medical staff should serve on the governing boards of hospitals with full voting privileges and for terms assuring proper rotation," the ACS Regents said. Basis for the policy was a report of a special study committee headed by Dr. Howard Mahorner of New Orleans, a member of the Board of Regents.

The ACS policy underscored the voting physician-member of the hospital board, saying "it is for the best interest of the patient and the hospital, and therefore, is imperative."

Sleeper in the policy is the fact that the AMA House of Delegates has also enunciated it. Between AMA and ACS, half of the votes on the Joint Commission on Accreditation of Hospitals are held. Of the 20 members of the commission, AMA names seven; ACS, three; the American College of Physicians, three; and the American Hospital Association, seven. Many observers believe that the policy may now be implemented through JCAH edict as a condition to hospital accreditation.

The Mississippi State Medical Association also acted on such a policy at the recent 99th Annual Session.

Mississippian Wins Disability Service Award

A special citation from the Social Security Administration was awarded to E. P. Rawson of Jackson, director of the Disability Determination Unit of the Vocational Rehabilitation Division in ceremonies at Atlanta on April 28. Rawson was cited and commended for exemplary service in his work with the disabled.

In accepting the award, Rawson said that credit for the success of the Mississippi program belongs to "our Disability Determination Unit staff and to the physicians of Mississippi." He praised the medical profession for "prompt and efficient service in providing evidence required by the SSA



E. P. Rawson of Jackson, director of the Vocational Rehabilitation Division Disability Determination Unit, right, receives a special award for service from William J. Page, Jr., of Atlanta, HEW regional director.

Bureau of Hearing Appeals in reaching fair and just decisions on claims."

A native of Lauderdale County, Rawson is a retired Air Force colonel and a former instructor at Mississippi State University. In 1947, he joined the State Department of Education, became a counselor with the Vocational Rehabilitation Division in 1959, and was promoted to his present position in 1961.

Association spokesmen congratulated Rawson on the award, stating that he maintains continuing liaison with the association in the disability claims program.



When eating fads of teens or tots Lead to a sudden case of "trots"

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin,
and protects intestinal mucosa

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.



Parepectolin[®]

Each fluid ounce of creamy white suspension contains:

*Paregoric (equivalent) (1.0 dram) 3.7 ml.
Contains opium (1/4 grain) 15 mg. per fluid ounce.

warning: may be habit forming

Pectin (2 1/2 grains) 162 mg.
Kaolin (specially purified) (85 grains) 5.5 Gm.
(alcohol 0.69%)

Usual Children's Dose: One or two teaspoonfuls three times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

Minimum Wage Zooms Hospital Costs

Higher wages and more personnel have resulted in an increase of \$5.31 in total hospital expense per patient day in January 1967 as compared to the same month in 1966, according to figures in Hospital Indicators released today by the American Hospital Association.

In January 1966 a hospital's cost of caring for a patient for one day was \$45.55; a year later this cost increased to \$50.86.

Hospital Indicators, published monthly by the *Journal of the American Hospital Association*, is based on data from a sample of 628 community hospitals taken from a universe of 5736 hospitals registered by the AHA.

Payroll expenses account for about two-thirds of the hospital's operating costs. In January 1966 hospital payroll expense per patient day totaled \$28.01; in January 1967 this expense category totaled \$31.54.

The AHA survey also showed an increase of more than 80,000 full-time hospital personnel in the 12 month period. Hospitals reported 1,251,453 employed in January 1966 and 1,332,328 in January of this year. Part-time personnel increased from 296,995 in 1966 to 334,772 in January 1967.

'Mississippi Doctor' Back Issues Sought

Seeking back issues of the *Mississippi Doctor*, official journal of the state medical association for more than a generation, Dr. W. H. Anderson of Booneville, who edited and published the scientific monthly, is endeavoring to complete his entire bound collection. He lacks five issues.

These are April and November of 1940, September of 1943, April of 1946, and July of 1954.

Dr. Anderson, senior living past president of the association, said that he hopes members will search personal libraries and journal files for the missing issues. They should be mailed to Dr. Anderson at 111 West Church St., Booneville 38829.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 595-1151

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 41 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL.

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

Volume VIII
Number 7
July 1967



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
TEMPLE AINSWORTH, M.D.
President
JOSEPH B. ROGERS, M.D.
President-elect
WALTER H. SIMMONS, M.D.
Secretary-Treasurer
WILLIAM E. LOTTERHOS, M.D.
Speaker
JAMES L. ROYALS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

CONTENTS

ORIGINAL PAPERS

Refinements in the
Surgical Management
of Duodenal Ulcer **397** WILLIAM O. BARNETT, M.D.

SPECIAL ARTICLES

We Are the Witnesses **405** JAMES T. THOMPSON, M.D.

Case Report
XIII; Maternal
Mortality Study **409** RALPH L. BROCK, M.D.

Radiologic Seminar
LXIII **412** T. SCOTT McCAY, M.D.

Constitution and
By-Laws **415** Annual Publication

EDITORIALS

The Mixed Blessings
of the Federal
Research Dollar **423** Pluralistic Support Needed

The Optometrists
and Title XVIII **428** Opticare? Never!

Shifting Shares in
the Health Care Dollar **432** Hospitals: up, Up, UP!

THIS MONTH

The President
Speaking **414** Home Health Services

The Literature **437** New Books Reviewed

The New Council on
Scientific Assembly **441** Planning the 100th

Medical
Organization **445** UMC Graduates 114

SKF Publishes Drug Abuse Text

The first comprehensive text to help teachers understand and combat the problem of drug abuse among students is now available.

It is "Drug Abuse: Escape to Nowhere—A



Escape to nowhere

Guide for Educators" published by Smith Kline & French Laboratories, the Philadelphia-based prescription drug firm, in cooperation with the American Association for Health, Physical Education, and Recreation, a department of the National Education Association.

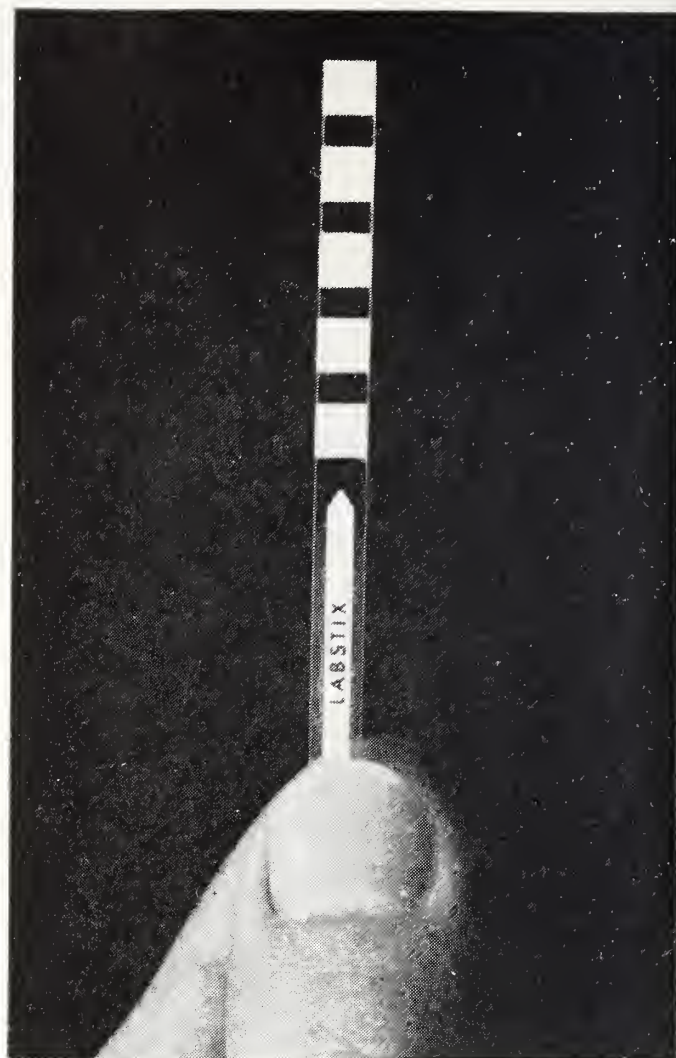
"The purpose of the book is to help teachers by filling the information vacuum about drug abuse," said F. Markoe Rivinus, president of Smith Kline & French. "Its preparation demonstrates how a business firm and a professional association can work together to attack a problem that concerns them both."

Dr. William G. Carr, executive secretary of NEA, called the guide "a timely and significant aid to educators in combating a serious threat to the youth of our nation." Commenting further, Dr. Carr said, "young people need to understand the dangers of misusing drugs and they need informed and sympathetic adults who can help them understand the problems involved. This new book combines factual information with sensible suggestions for working with students at the elementary, high school and college levels. I commend its usefulness to teachers, counselors, and administrators, as well as to parents."

"Drug Abuse: Escape to Nowhere" presents an historical look at drug abuse and has descriptions of drugs and non-drug products susceptible to abuse. The drug abuser is discussed, as are methods of therapy, educational approaches, problems of abuser identification, identification of drugs, what to do when drug abuse is suspected and procedures for drug abuse prevention.

Appendices cover drug distribution, legal controls, where to get help, films and references, and contain technical definitions, a glossary of slang and a drug abuse reference chart.

Prevention is stressed. "Truth concerning misuse of drugs is the best way prevention can be



Take five...

LABSTIX® provides 5 important urinary findings*—on a single reagent strip! That's *more* information than you can get from any other single reagent strip. You know the results in just 30 seconds—while the patient is still in your office—and readings are reliable and reproducible. LABSTIX is easy to handle, too. Never goes limp, even when wet, because it's made with clear, firm plastic. And results with LABSTIX are easy to read—color contrast between the test areas and the transparent plastic is clearly defined. An unexpected "positive" from testing with LABSTIX may help in detecting hidden pathology before marked symptoms are manifest.

*Blood; ketones; glucose; protein, and pH.

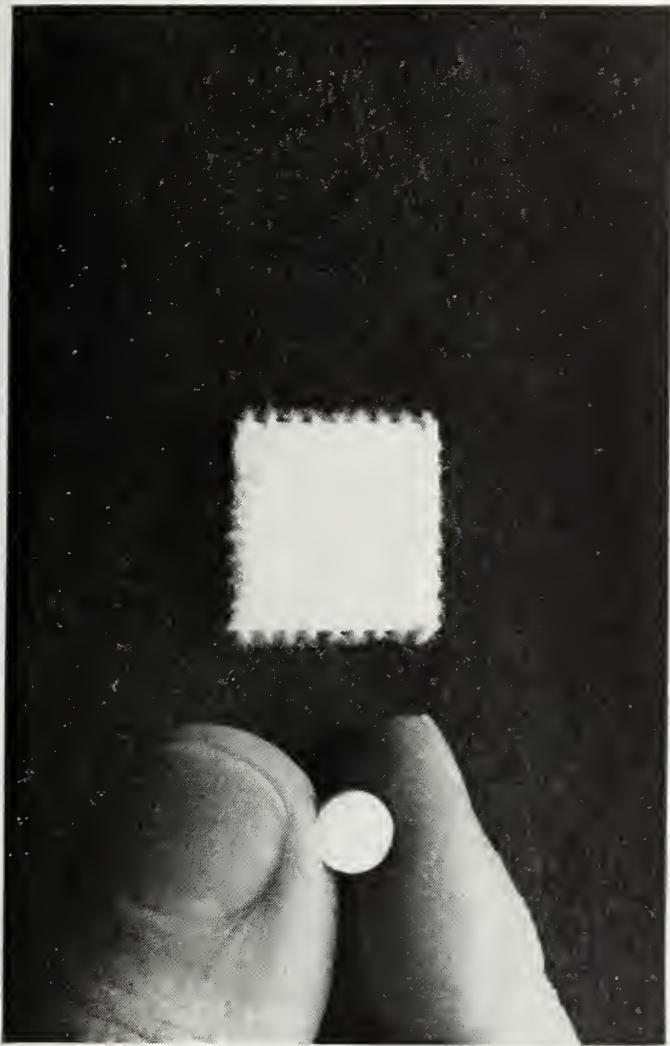
AMES COMPANY
Division Miles Laboratories, Inc.
Elkhart, Indiana 46514



Ames

Note: AMERICAN HOSPITAL FORMULARY SERVICE
CATEGORY NUMBER 36:88

40167



...Plus one

You can extend your testing scope by including ICTOTEST® Reagent Tablets, the 30-second determination for bilirubinuria—which can be an early sign of obstruction of the common bile duct, infectious hepatitis, or other liver disease. This test is also useful for detecting liver damage from carbon tetrachloride and other halogenated hydrocarbons used as industrial and household solvents. Positive findings with the urine-testing team of LABSTIX and ICTOTEST can represent significant guides to patient management in many clinical situations. “Negatives” may help rule out suspected abnormalities over a broad clinical range and are important for the patient’s record.

AMES COMPANY
Division Miles Laboratories, Inc.
Elkhart, Indiana 46514



Ames

Note: AMERICAN HOSPITAL FORMULARY SERVICE
CATEGORY NUMBER 36:88

40167

accomplished. . . . Facts and positive motivation are what young people need to help them make a sound decision should they one day face the pressure of ‘going along’ with the drug abuse crowd,” the foreword states.

Michigan Blue Shield Tops U.S. in Benefits

Members of Michigan Blue Shield received more dollar-benefits for medical care than did members of any of the other 74 Blue Shield Plans in the nation, John C. McCabe, president, said in the corporation’s 1966 annual report.

Medical Care benefits totaled \$120 million in 1966, an increase of more than \$13 million over 1965.

Other 1966 highlights:

—Michigan Blue Shield had the largest net gain in enrollment of the top 14 Blue Shield Plans. At the end of the year, 1,638,182 Blue Shield contracts protected 4,191,171 members, more than half of Michigan’s population. The enrollment increased by 374,718 members during 1966.

—Subscriber claims were paid at a benefit rate approximating \$1,000 a minute.

—Blue Shield held the line on subscription rates.

—Operating expenses were 6.7 per cent of subscription income—lowest of the eight largest Blue Shield Plans in the nation. (The national average for operational expense was 8.8 per cent of subscription income.)

—Subscribers in the automobile industry received for the first time new and extended benefits covering convalescent and long-term illness care, nervous and mental services, pre and post-natal care, immediate maternity coverage, extended dependent children coverage, and provision for out-patient psychiatric care.

—Full payment provisions for x-ray and EKG services were introduced.

—Non-group coverage was extended from 30 in-hospital medical days to 120 days, at no increase in rate.

Looking ahead, McCabe said, “Momentous changes are taking place in the field of medical economics, and we must lead rather than simply react to change.”

He pointed out that Blue Shield also is conducting an in-depth study of prepayment health care, sampling the opinions of leaders in the medical, public, industrial, commercial and farming communities.

14 of the reasons why hospital care is better today than ever before:



When you enter a hospital today, a highly trained staff goes into action to help you get well — as fast as possible. Because of better-trained personnel and better equipment for diagnosis and treatment, today's hospitals are far more advanced than the hospitals of ten, or even five, years ago. But along with this medical progress have come higher costs. Blue Cross-Blue Shield, through its wide choice of plans, has kept pace with modern hospital costs. Only your Blue Cross Plan provides "hospital service benefits" . . . which pay for most hospital services in full, regardless of the amount used. Dollar for dollar, Blue Cross-Blue Shield is today's best coverage for hospital and medical bills.



This is one of a series of public service messages—sponsored by Mississippi Hospital and Medical Service, (Blue Cross-Blue Shield), Jackson, Mississippi—designed to highlight our state's hospital and medical progress.

**This is one of a series of
messages appearing in
daily newspapers throughout
Mississippi as part of Blue
Cross-Blue Shield's continuing
program of informing the
public about our state's
medical and hospital progress,
along with the increasing
costs of better and broader
health care protection
necessary to provide today's
best coverage for hospital,
surgical and medical bills.**

**BLUE  CROSS
BLUE  SHIELD**

**MISSISSIPPI HOSPITAL & MEDICAL SERVICE
BOX 1043 / 530 EAST WOODROW WILSON AVENUE
JACKSON, MISSISSIPPI 39205**

PMA Publishes Drug Identification Booklet

The importance of identifying the origin of prescription drugs which people take is stressed in "Drugs Anonymous," a 15-page pamphlet published by the Pharmaceutical Manufacturers Association.

This pamphlet discusses the naming of drugs and drug products, the role of official compendia, results of many drugs studies, and the importance of manufacturer identification in support of the concept of quality in the prescribing and dispensing of prescription medications.

"Drugs Anonymous" is a revised edition of a 1966 policy statement by PMA, entitled "Compulsory Generic Prescribing—A Peril to Our Health Care System." Over 40,000 copies of the earlier statement were printed and distributed.

In the new pamphlet, PMA states its position in the controversy evident in current discussions on "brand" and "generic" drug prescribing. Copies can be obtained from PMA's Public Information Office, 1155 Fifteenth Street, N.W., Washington, D. C. 20005.

HEW Funds Health Professions Education

Grants totalling \$30 million to 170 schools and colleges in 44 States and the District of Columbia have been announced by Dr. Leonard D. Fenninger, director of the Bureau of Health Manpower, Public Health Service.

Ranging in size from \$23,890 to \$424,756, the grants are for the purpose of improving the quality of medical, dental, optometric, and podiatric education. Largest single grant was to the University of Indiana School of Medicine.

The grants are titled basic improvement grants and their amount is determined by statutory formula. They were recommended for approval by the National Advisory Council on Medical, Dental, Optometric, and Podiatric Education and approved by Surgeon General William H. Stewart.

Allowable grant expenditures include salaries of professional and supportive staff, associated fringe benefits, purchase of supplies and equipment, and allowable costs of minor alterations and renovations.

The grants may not be used for the operation of teaching hospitals, patient care, financial assistance to students, research, research training, or capital construction.

Tandearil® oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

July 1967

Dear Doctor:

Almost lost in the news of the Israeli victory is the story of the excellent medical care received by their armed forces in the fierce June fighting. Israeli casualties were reported at less than 700 killed and 2,000 wounded, J.A.R. losses were estimated at more than 7,000 killed and 30,000 wounded, and no really accurate figures are available for the Jordanian and Syrian campaigns.

Israel has the highest physician-to-population ratio of any nation in the world. Coupled with a model military reserve system, the quality and ability of the Israeli medical officer is high. Air superiority also contributed to better care for Israeli forces with airlift of wounded.

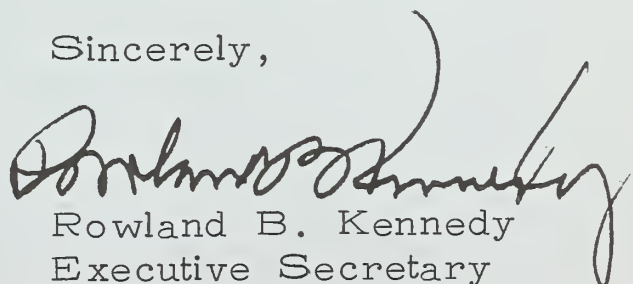
Tornadoes, hurricanes, and floods have claimed more than 980 American lives in the past five years, and 7 per cent were in Mississippi. New report from Metropolitan Life Insurance Co. studies shows that state is second in tornado deaths with Indiana leading nation. Mississippi sustained 69 deaths with 53 dead in March 1966 Jackson tornado.

More cases of malaria were diagnosed in first three months of 1967 in U.S. than during the entire year of 1966. Public Health Service authorities say that the Vietnamese anopheles is the culprit and that returning service personnel are the carriers. At present rate of case-finding, there will be 3,000 cases of malaria in U.S. this year.

Hearings on costs and delivery of health care services for the elderly conducted by a senate subcommittee in June are largely inconclusive. Sen. Smathers' (D., Fla.) group probed questions of rising care costs as regards the aged, whether Medicare is causing or solving problems, and accessibility of care for seniors. The hearings were said to be "informational" and were not conducted on any pending legislation.

AMA-ERF's second solicitation for voluntary gifts featured a letter from Dr. Jerry Leu of Oklahoma. He became the 300,000th living American physician at his graduation in 1966. Most AMA-ERF funds are now going into the loan program which has more than \$35 million out to 19,000 students, interns, and residents. It's fully deductible, too.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

Children's Health Stations Are Opened In Birmingham

Birmingham - A network of four health stations to provide continuous comprehensive care for indigent children is being opened in conjunction with the Alabama Medical Center. Each station is staffed by a nurse with special training in illness detection. The stations will funnel patients into a center staffed by a qualified pediatrician. Where more extensive diagnostic study and treatment are required, patient is further referred to the University center.

JCAH Tightens Hospital, Nursing Home Standards

Chicago - The Board of Commissioners of the Joint Commission on Accreditation of Hospitals now requires that an M.D. be in charge of a hospital laboratory when a qualified pathologist is not available, but this does not excuse requirement that a pathologist examine tissue. JCAH also will require statement of an engineer as to nursing home physical plant and construction as prerequisite to accreditation. A third new requirement is codification of hospital policy as to coordinating medical and allied health services in the hospital.

Capital Activity Points To Drugs For Medicare

Washington - A rash of bills in the Congress and efforts by HEW point to expansion of Medicare to include drugs on outpatient basis. Bill by Sen. Montoya (D., N.Mex.) would provide generic-only drugs and raise Part 1-B costs to \$4 per month. Sen. Long (D., La.), the drug industry's leading critic, would make all federally-purchased drugs generic-only. HEW has set up a task force to study ways of providing drugs under Medicare, and group will probably also recommend legislation.

ACS Sets Standards For Ambulance Services

Chicago - The American College of Surgeons' Committee on Trauma has released new standards for emergency ambulance service, the first nationwide guides established by an authoritative group. Covered are licensure, sponsoring organizations, financial responsibility, model ordinances, driver and attendant training and qualifications, and vehicle, equipment, and communications standards.

Auto Makers Seek Medical Advice On Safety

Detroit - Two AMA's, the American Medical and Automobile Manufacturers associations, have been meeting jointly on automotive safety. The auto maker's Engineering Advisory Committee is seeking medical advice on safer interior design for future cars with priority on seat design, torso restraint, and adequate head protection. Effort is in addition to federal safety regulations due for 1968 models.



ORIGINAL PAPERS

Refinements in the Surgical Management of Duodenal Ulcer

WILLIAM O. BARNETT, M.D.

Jackson, Mississippi

GASTROENTEROSTOMY was one of the earlier surgical maneuvers intended to control intractable duodenal ulceration, the theory being that continued emptying of alkaline duodenal content into the stomach would serve as a source for auto-neutralization of gastric acid. The unacceptably high incidence of recurrent ulceration following gastroenterostomy served as a stimulus for surgeons to explore the efficacy of other operative procedures for primary duodenal ulceration.

In view of these circumstances, it is understandable that most effort was oriented toward control of ulcer recurrence, with other considerations being relegated to a lesser role. So it was that gastric resection came upon the scene during the early one-third of this century. Indeed, at last the surgeon could employ an operation which gave strong promise that the patient would not subsequently incur precisely the same ailment for which he had just finished enduring physical and financial discomfort.

It was soon evident that the higher the gastric resection, the less the chance for recurrent ulceration, and this factor was additionally instrumental in precipitating the sacrifice of extensive portions of gastric tissue. Warnings of concern were next heard, and such terms as "gastric cripple" were used to describe the adverse effects of massive removal of gastric tissue with the resulting con-

tracted reservoir. Anemia, weight loss, and the dumping syndrome were among the disagreeable sequelae of gastric resection (Figure 1).

With this background, vagotomy was introduced in the mid-1940's as an operation which would eliminate the necessity for sacrifice of extensive portions of the gastric reservoir, and at the same

Vagotomy, which was introduced in the mid-1940's, has gained wide acceptance in the surgical armamentarium for intractable duodenal ulcer. The author reports that as a result of his research he employs selective anterior and total posterior vagotomy as the procedure of choice. He discusses operative procedure, gastric drainage, and resection of the gastric antrum.

time it could be depended upon to effectively reduce gastric acidity.¹ With the addition of a drainage procedure, and in spite of considerable resistance from prominent members of the national surgical community, vagotomy has gained wide acceptance in the surgical armamentarium for intractable duodenal ulcer.

A consideration of more recent vintage relates to the question of whether or not vagal denervation of all of the abdominal viscera is necessary in order to accomplish interruption of the particular fibers which supply the stomach. The operation

From the Department of Surgery, University of Mississippi School of Medicine.

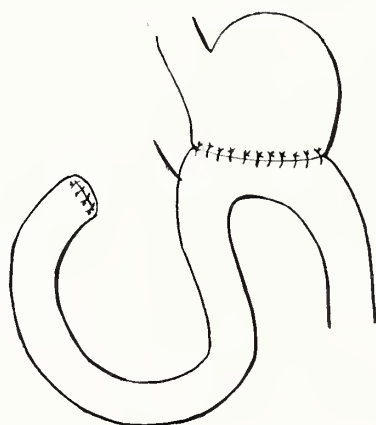
of selective gastric vagal denervation is sufficiently attractive on a theoretical basis to merit investigation in depth. A major concern of surgeons confronted with the possible employment of selective vagotomy is whether or not gastric denervation can be effected as completely as has been possible with truncal vagotomy. A significant predisposition to incomplete vagotomy with an unacceptable frequency of recurrence would constitute firm grounds for rejection of the procedure.

TABLE 1
RELATIVE FREQUENCY OF ULCER FORMATION

Vagotomy	No. Dogs	No. With Ulcer
None	20	18
Total	20	6
Selective	20	4

Experiments were designed to evaluate the relative efficacy of total versus selective vagotomy in preventing ulceration of an interposed loop of ileum between the stomach and duodenum² (Figure 2). Without vagotomy, we observed

TRoublesome Sequelae After Subtotal Gastric Resection



1. Microcytic and macrocytic anemia
2. Problems in weight maintenance
3. Dumping syndrome
4. Impaired digestion and absorption of protein, carbohydrate, and fat

Figure 1. Complications of concern after high gastric resection.

ulceration of the segment in 90 per cent of the animals, while this figure was lowered very significantly after truncal vagotomy (Figure 3). Additionally, selective vagotomy was equally effective in preventing ulcers (Table 1). These experi-

ULCEROGENIC PREPARATION

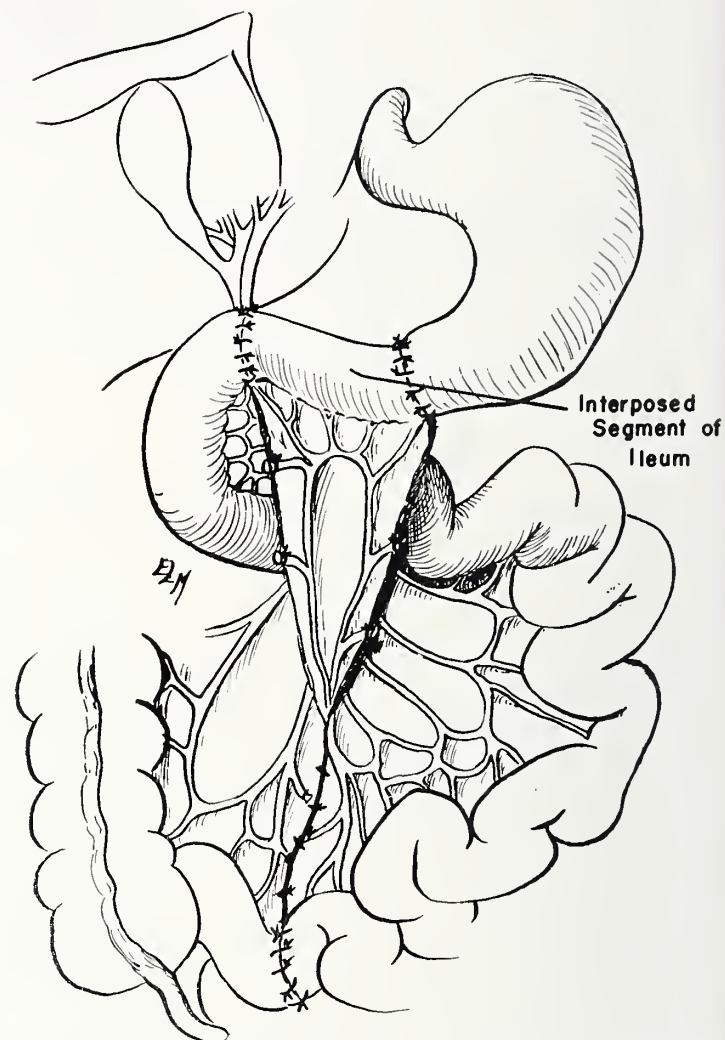


Figure 2. Technique for experimental production of ulcers.

mental studies support the contention of certain authors³ that selective vagotomy can be effected with the same degree of completeness as that observed after total vagotomy.

The studies related thus far suggest that selective vagotomy is as good as the truncal variety, but this is not enough. The former procedure must evidence a distinct advantage in order to justify the additional care and effort necessary for satisfactory execution. It was with this consideration in mind that we embarked upon the next series of studies concerned with intestinal absorption. The posterior vagus nerve innervates the entire small bowel as well as half of the colon. Moreover, the pancreas receives a generous supply of fibers from the posterior vagus, and it is known that pancreatic secretions are definitely controlled, at

least in part, by neural activity. What, then, is the influence of posterior truncal vagotomy upon pancreatic and small intestinal activity in relation to the absorption of protein, carbohydrate, and fat?

Experimental studies involving 78 adult mongrel dogs revealed no significant difference in fat absorption after total or selective vagotomy when combined with pyloroplasty. The values were also very similar to those obtained with pyloroplasty alone. Similarly, protein absorption did not appear to be significantly impaired after either type of vagotomy. Furthermore, carbohydrate absorption was relatively normal after both total and selective vagotomy.⁴

Extensive histologic studies of the small bowel at intervals up to a year were unsuccessful in

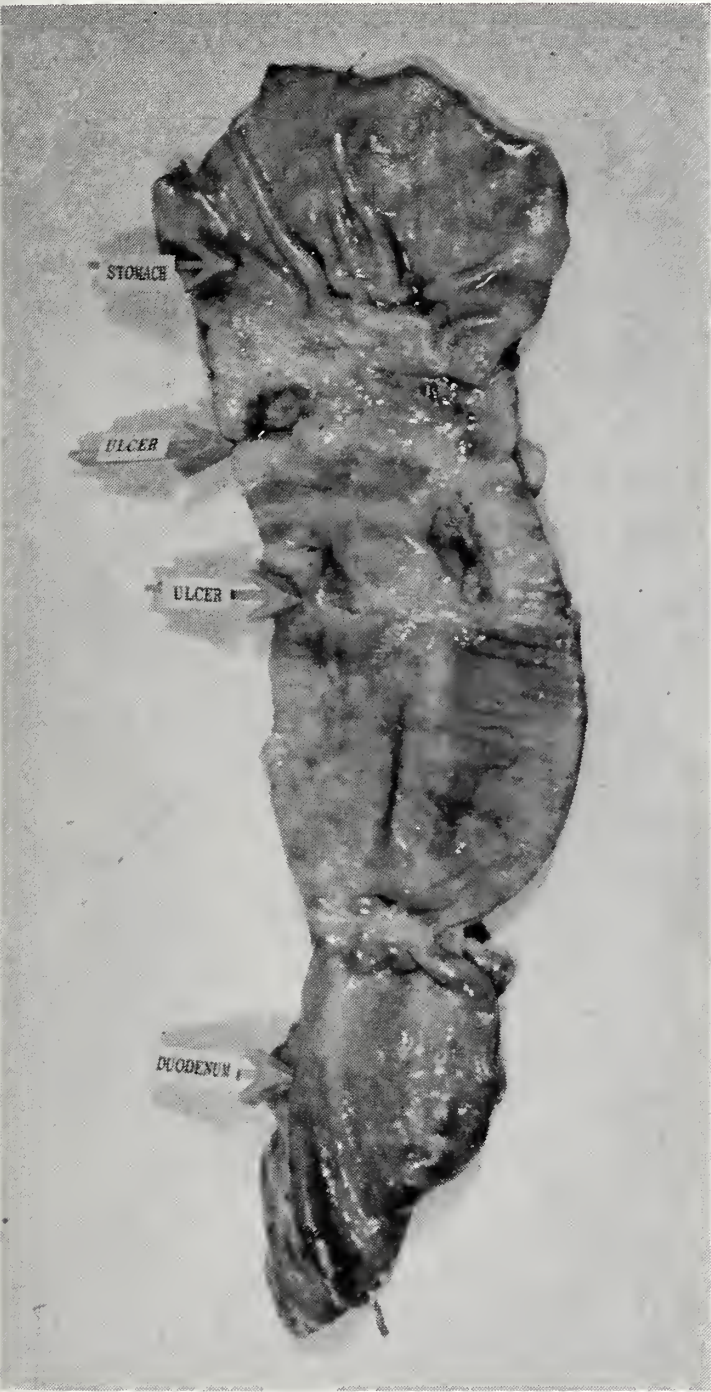


Figure 3. Experimental ulcer created in dog.

APPEARANCE OF GALL STONES AFTER RESIDING IN THE DOG'S GALL BLADDER

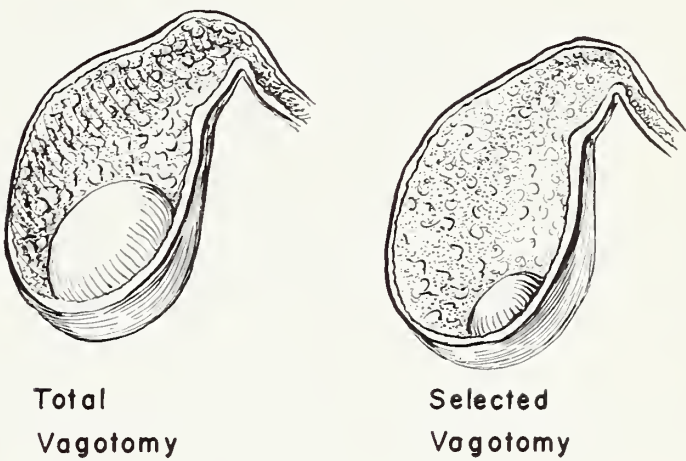


Figure 4. Difference in size of stones may be related to stasis following biliary tract denervation.

demonstrating any abnormal changes after vagal denervation. Additional examination utilizing the electron microscope revealed entirely normal cellular structures after vagotomy.⁵

The complication of intractable diarrhea after vagotomy has been a source of concern in some centers, although it has not been a significant problem in our experience. To date, the evidence suggests that there is no concernable difference in the incidence of diarrhea between patients with total and selective vagotomy.⁶

Thus, the conclusion is apparent that we have been unable to demonstrate any significant advantage of selective posterior vagotomy over truncal division of this nerve. Our experience indicates that the additional time, effort, and care necessary to effect posterior selective vagotomy cannot be justified by the evidence currently at hand.

The anterior or left vagus nerve is usually the smaller of the two vagi. Its abdominal ramifications are less extensive, usually providing the parasympathetic innervation to the liver, biliary tract, and stomach. Adverse effects of anterior vagotomy upon the biliary tract have been the concern of several reports. Johnson and Boyden observed consistent dilatation of the gallbladder after truncal vagotomy.⁷ Rudick and associates compared pre- and postvagotomy cholecystograms in patients and also recorded significant dilatation of the denervated gallbladder.⁸ Of great interest was the finding that this change could be prevented by selective anterior vagotomy with preservation of the innervation to the biliary tract. Nielsen reported cases in which the development of gallstones may have been related to vagotomy.⁹

We studied the problem in the experimental

laboratory with three groups of dogs. In all animals a human gallstone was operatively placed within the dog's gallbladder. After two weeks it was removed, at which time the size was recorded. The first group of animals did not have a vagotomy, and the gallstones totally disappeared in some cases, while the others decreased in size remarkably. In most instances Group 2 animals, who sustained a total vagotomy, evidenced minimal to no change in the size of the gallstone. The animals of Group 3 received a selective anterior vagotomy with preservation of the anterior vagal fibers to the biliary tract. It is of interest that the findings here were similar to those of Group 1, in that all stones were characterized by a marked decrease in size, while some disappeared completely.¹⁰

Thus, the experimental evidence does, indeed, support the impression of those who concluded from clinical studies that the postvagotomy gallbladder loses tone, becomes somewhat overdistended, and promotes stasis. Certainly the disappearance rates of gallstones in our experimental study are most probably related to the development of stasis and an element of stagnation after truncal vagotomy. We believe that extended clinical comparative studies are likely to confirm the current impression that biliary vagal denervation does predispose to gallstone formation.

PROCEDURE OF CHOICE

As a result of this evidence we have chosen selective anterior and truncal posterior vagotomy as the procedure of choice in the management of intractable duodenal ulcer. It is our conviction that the anterior vagal fibers to the biliary tract do not play a contributory role in the etiology of ulcers, that the fibers can be preserved without threatening the completeness of the gastric vagotomy, and that anterior selective vagotomy can be effected with relative ease, without undue prolongation of operative time. Several important technical points are worthy of emphasis.

The abdominal incision can be slightly and helpfully extended in an upward direction between the costal margin and the xyphoid in many instances, a maneuver which aids out of proportion to the minimal length added to the incision. Downward traction upon the stomach is essential to location of the anterior vagus nerve. In those cases where exposure of the abdominal esophageal area is difficult, it is often helpful to direct the initial effort

toward freeing the gastrocolic attachments along the greater curvature (Figure 5). Mobilization of this area will materially assist in accomplishing greater downward traction and thus lower the esophagogastric level to a more accessible point.

TECHNIC EMPLOYED

The anterior vagus can frequently be palpated before it is visibly accessible. We prefer to snare the main trunk with a nerve hook following which an umbilical tape is passed around the nerve with the aid of a medium-size right angle clamp. Upward traction can then be exerted during the dissection. Hepatic and biliary tract branches in the gastrohepatic omentum are readily visible except in the markedly obese patient. With traction exerted upon the main trunk, the course of the nerve can be located where it continues beyond the origin of the hepatic branches (Figure 6). Total division at this point can be readily accomplished. Completion of the selective vagotomy can then be accomplished by clamping, dividing, and ligating all branches from this point back up to the level around which the umbilical tape had been passed. Traction upon the main trunk at this stage will conclusively demonstrate that the terminal biliary tract and liver branches constitute the only

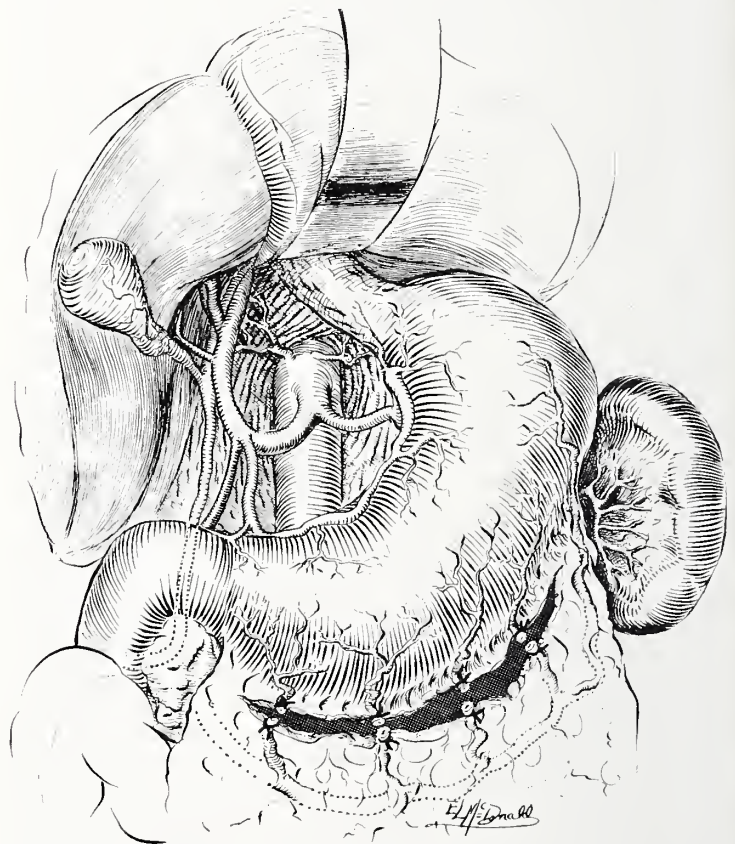


Figure 5. In difficult cases, exposure of the vagus nerves may be facilitated by the increased mobility resulting from division of gastrocolic attachments.

SELECTIVE ANTERIOR VAGOTOMY

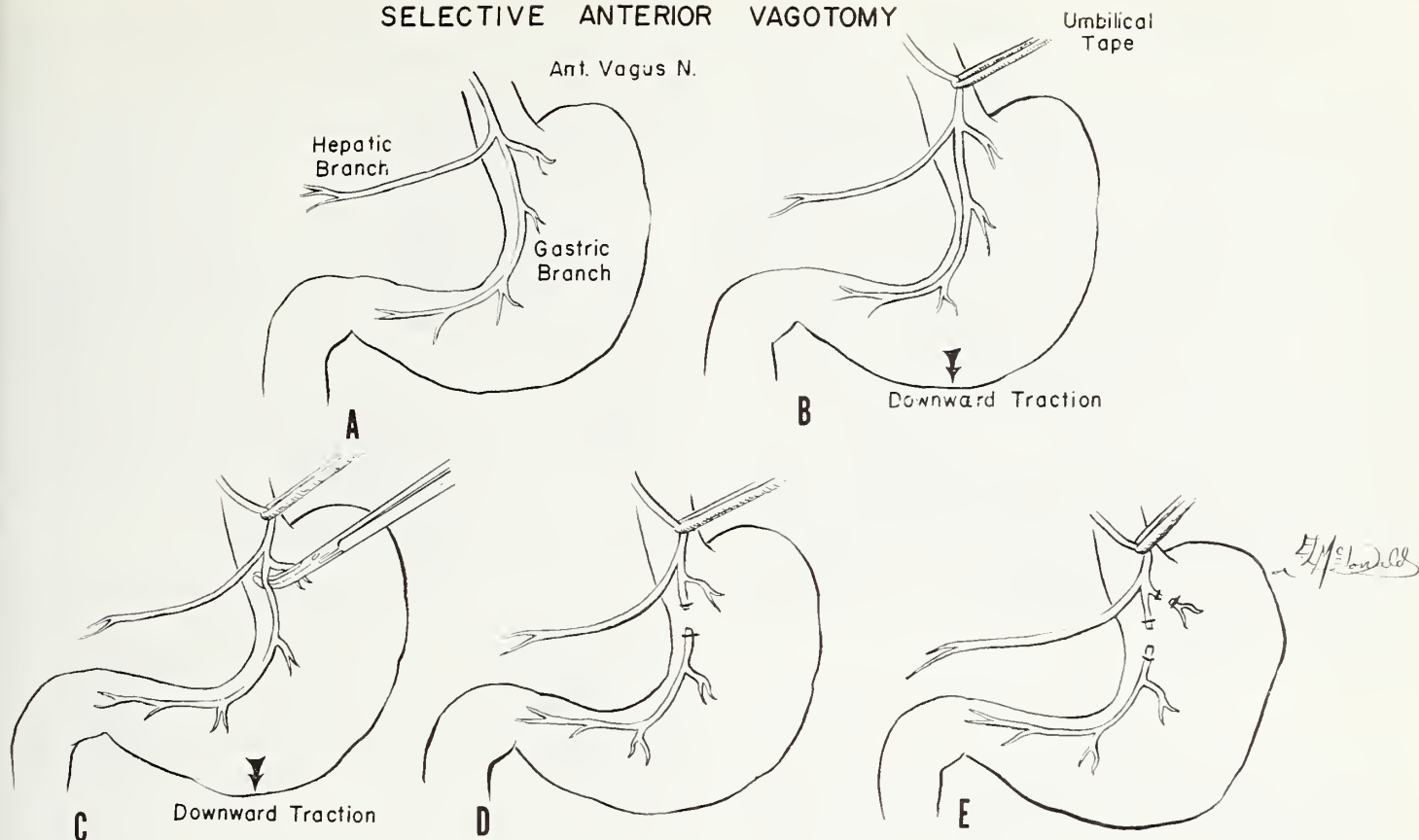


Figure 6. Technique of selective anterior vagotomy. A. Usual anatomy. B. Tape around trunk of anterior vagus. C. Hemostat elevates main trunk of vagus distal to origin of hepatic branch. D. Division

of distal trunk of anterior vagus. E. The trunk of the anterior vagus is continuous only with the biliary and hepatic branches following division of the gastric branches of the nerve.

fibers of the anterior vagus which remain intact (Figure 6).

Adequate drainage of gastric content is a must after vagotomy. The Heineke-Mikulicz type of pyloroplasty has not, in our experience, provided dependent drainage of the stomach as efficiently as had been hoped. Only the Finney pyloroplasty combines the desirable features of dependent gas-

tric drainage and gastroduodenal continuity.¹¹ After mobilization of the duodenum according to the maneuver of Kocher, a serosal layer of interrupted cotton suture can be placed between the stomach and duodenum with ease. The Finney pyloroplasty gives greatest assurance of a secure gastroduodenal closure with preservation of an adequate functional lumen (Figure 7).

FINNEY PYLOROPLASTY

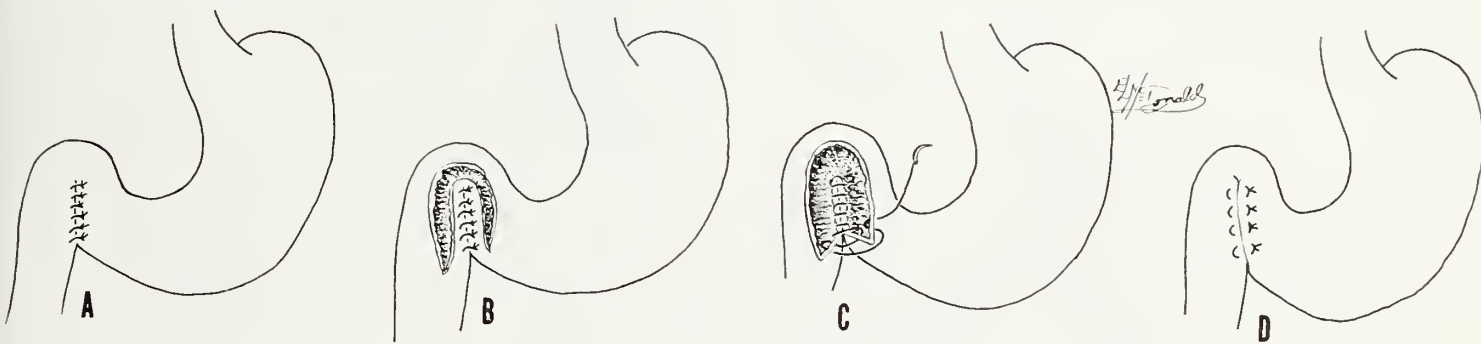


Figure 7. Technique of Finney pyloroplasty. A. Serosal sutures of 000 cotton between stomach and duodenum. B. Curved incision through the duodenum and onto the stomach. C. Continuous, locked 00 chromic suture started on the upper mucosal surface and carried downward as a continuous lock suture.

The suture is brought to the anterior surface and carried back to the superior angle on the anterior surface as a Connell suture. D. Interrupted horizontal mattress sutures unite the anterior serosal surfaces of the duodenum and stomach.

If vagotomy combined with a drainage procedure has a deficiency, it probably relates to the incidence of ulcer recurrence observed among these patients. It appears that, of the acceptable operations available today, antral resection along with vagotomy offers the most effective protection against this complication.¹² The extent of the resection of gastric tissue is sufficiently limited so that the troublesome complications observed after subtotal gastric resection are not in evidence. Use of this procedure does incur the necessity for dealing with a difficult duodenal stump in certain cases. Much of the mortality and morbidity following gastric surgery is related to complications arising from the area of closure of an inflamed, scarred duodenum.

CREATION OF FISTULA

Where difficulty is encountered, the surgeon may consider the deliberate creation of an external duodenal fistula by use of a catheter duodenostomy. This method of management is based upon the principle that the fistulous tract will ultimately scar down and close. We have gained considerable ex-

perience with a method of difficult duodenal stump management which utilizes a Roux-en-Y limb of jejunum for closure. In none of the cases has leakage been encountered after use of this technique.

CLOSURE ALTERNATIVE

When it is decided, after exploratory dissection, that primary closure of the duodenal stump is hazardous, we introduce a sponge into the lumen of the stump to minimize leakage and turn our attention to completion of the gastrojejunal anastomosis. Then the efferent loop of jejunum is next divided, and the distal segment is moved to the area of the duodenal stump.

A point for transection of the efferent jejunal loop is selected six to twelve inches below the stomach (Figure 8). Blood vessel distribution is also a factor in determining the exact site for division. The distal portion of the divided efferent limb is then advanced toward the open duodenal stump where a layer of 3-0 cotton sutures is placed between the serosal layer of the jejunum and the posterior wall of the duodenum, where available. In the majority of instances it is necessary to utilize the ulcer crater upon the surface

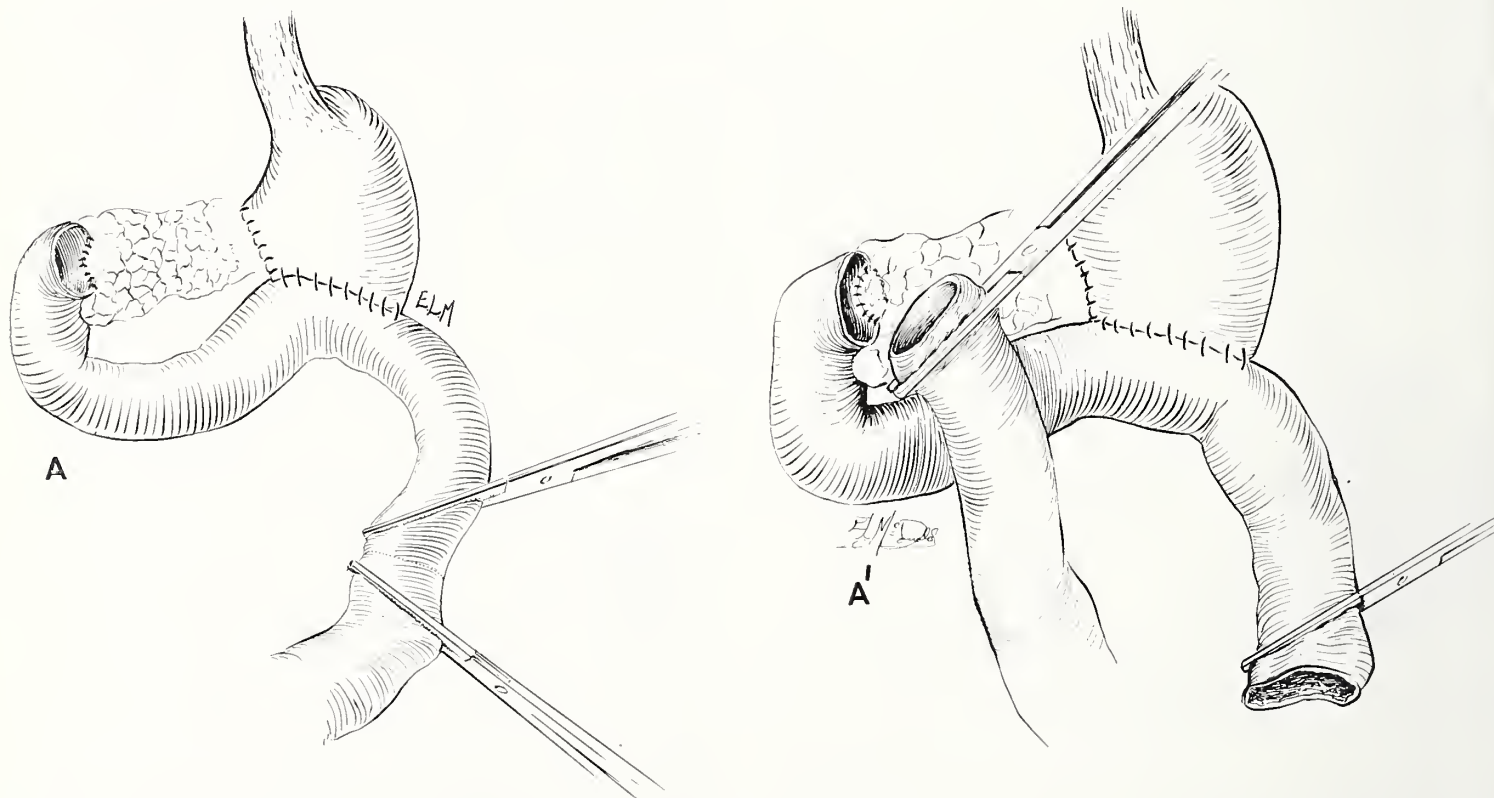
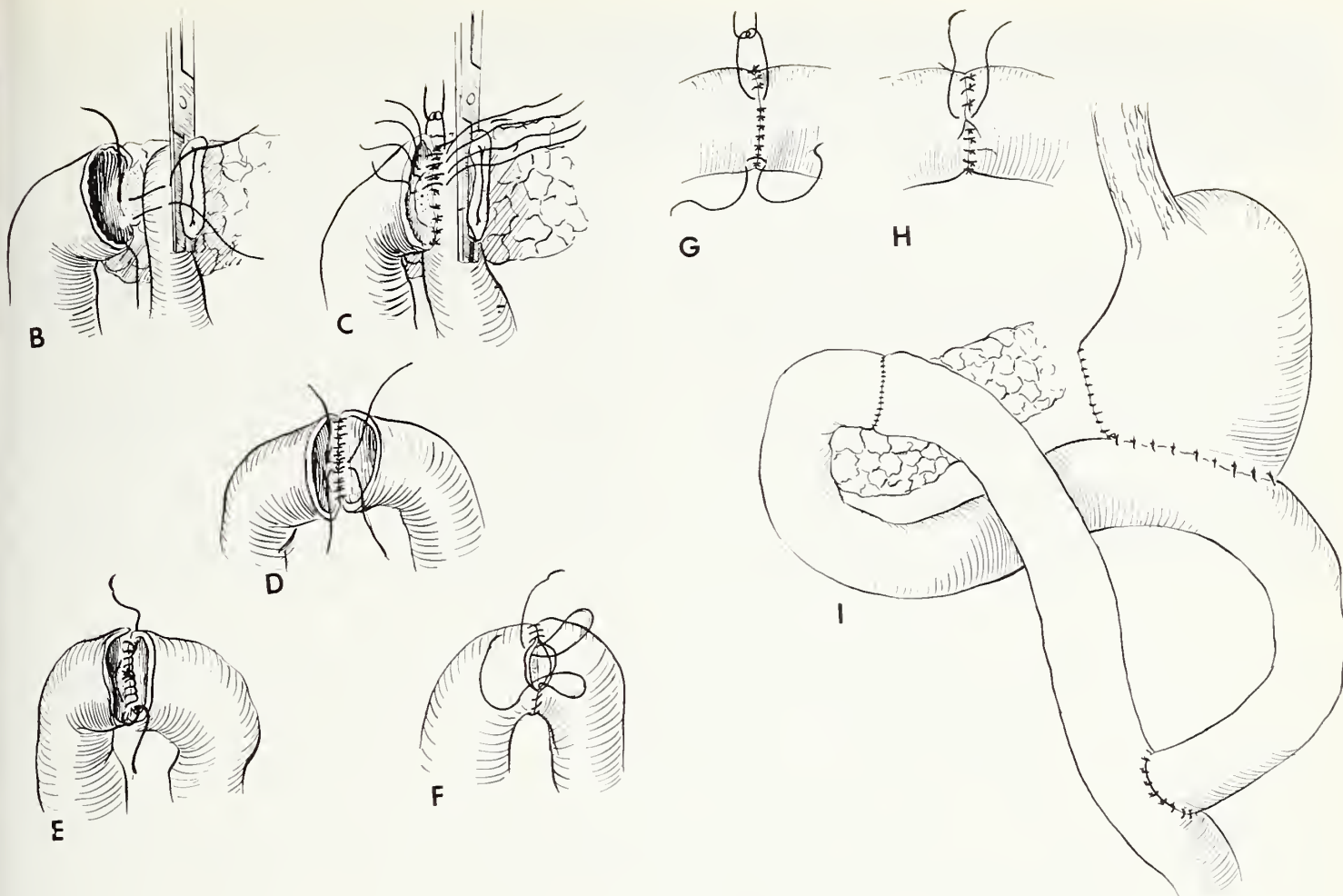


Figure 8. Management of the difficult duodenal stump. A. Transection of the efferent jejunal loop 6 to 12 inches below the stomach. A'. Distal end of jejunum moved to area of duodenal stump. B. 000

cotton sutures unite serosa with ulcer bed on pancreas. C. Second row of 000 cotton sutures between serosa and ulcer bed in pancreas. D. 00 catgut sutures between mucosa of jejunum and ulcer bed or



duodenal mucosa if it's available. E. Completed, continuous, lock sutures involving posterior wall. F. Continuous catgut sutures carried anteriorly according to Connell technique and tied together. G. Inter-

rupted, Lembert (000 cotton) sutures between serosal layers of duodenum and stomach. H. Second layer of interrupted, cotton sutures. I. Completed stump closure and end to side jejunojejunostomy.

of the pancreas where the duodenal wall has been eroded away.

SECOND SUTURE LAYER

The second posterior layer of interrupted cotton sutures is placed between the jejunum and the ulcer crater in those areas where no duodenum is available. The third posterior layer consists of 2-0 chromic sutures, two of which are begun in the midportion of the posterior suture line. They are tied together and extended laterally as continuous lock sutures. Additionally, these are continued anteriorly as Connell sutures and tied together. Two additional anterior suture lines, generously inverting the anterior walls of the duodenum and jejunum, are finally effected with 3-0 interrupted cotton (Figure 8).

The use of vagotomy for control of gastric hypersecretion in patients with intractable duodenal ulcer has gained increasingly widespread acceptance. Selective, anterior vagal denervation of the stomach appears to have merit in view of the in-

creasing evidence of adverse effects upon the biliary tract following truncal vagotomy. We have been unable to demonstrate significant side effects following total posterior vagotomy. Absorption of protein, carbohydrate, and fat was equally efficient after both total and selective vagotomy. Additionally, no histologic changes of significance were demonstrated after vagal denervation of the small bowel.

POST-VAGOTOMY DIARRHEA

We are not convinced that the incidence of post-vagotomy diarrhea can be altered by selective posterior vagotomy. In view of these findings, we currently employ selective anterior and total posterior vagotomy in the surgical management of duodenal ulcer. Drainage of the vagotomized stomach in our experience is most efficiently provided by a Finney type of pyloroplasty. Removal of the gastric antrum as a part of the ulcer operation affords greatest protection against recurrent ulceration. The difficult duodenal stump can be

DUODENAL ULCER / Barnett

closed very efficiently by use of a Roux-en-Y limb of the efferent jejunum. ★★★

2500 North State St. (39216)

REFERENCES

1. Dragstedt, L. R.; Harper, P. V.; Tovee, E. B., and Woodward, E. R.: Section of the Vagus Nerves to the Stomach in the Treatment of Peptic Ulcer, *Ann. Surg.* 126:687, 1947.
2. Hilbun, B.; Barnett, W. O., and Davis, J. T.: Ulceration of Interposed Ileal Segments After Various Degrees of Vagotomy, *Surg., Gynec. & Obst.* 122:1251, 1966.
3. Griffith, C. A.: A New Anatomic Approach to the Problem of Incomplete Vagotomy, *Surg. Clin. N. Amer.* 44:1239, 1964.
4. Tucker, F. H.; Barnett, W. O., and Goodrich, J.: The Influence of Various Degrees of Vagotomy Upon Fat, Carbohydrate and Protein Absorption Following Pyloroplasty, *Surg., Gynec. & Obst.* 118:1281, 1964.
5. Elliott, R. L.; Barnett, W. O., and Elliott, M. C.: An Ultrastructural Study of the Small Intestine after Vagotomy, *Surg. Forum (A.C.S.)* 17:331, 1966.
6. Scott, H. W.: Personal communication.
7. Johnson, F. E., and Boyden, E. A.: The Effect of Double Vagotomy on the Motor Activity of the Human Gallbladder, *Surgery* 32:591, 1952.
8. Rudick, J., and Hutchison, J. S.: Evaluation of Vagotomy and Biliary Function by Combined Oral Cholecystography and Intravenous Cholangiography, *Ann. Surg.* 162:234, 1965.
9. Nielsen, J. R.: Development of Cholelithiasis Following Vagotomy, *Surgery* 56:909, 1964.
10. Barnett, W. O., and Hilbun, G. R.: Dissolution of Human Gallstone in the Dog's Gallbladder after Various Degrees of Vagotomy, *Surgery* 60:840, 1966.
11. Griffith, C. A.: Selective Gastric Vagotomy, *Surg. Clin. N. Amer.* 46:367, 1966.
12. Herrington, J. L., Jr.: Vagotomy and Antral Resection, in Harkins, H. N., and Nyhus, L. M.: *Surgery of the Stomach and Duodenum*, Boston, Little, Brown and Company, 1962, pp. 487-504.

ALABAMA DILEMMA

Alabamians recognize that they face a potentially difficult legal problem. Were the Wallaces to become divorced, who would get custody of the state?



We Are the Witnesses

JAMES T. THOMPSON, M.D.

Moss Point, Mississippi

THREE BASIC and fundamental questions on health services have historically confronted American medicine. They are not subjective, because there has never been a question of "if health care will be provided" or "whether care shall be given." To ask such a question would be to say that the large and competent force of skilled medical manpower and specialized institutions in this nation exist for nothing.

The questions are fully objective, and they are directed toward valid problems whose solutions are honestly sought.

The first is this: How much health care can be rendered and for whom?

The second: How shall it be delivered?

The third: How shall the bill be paid?

Nearly everybody knows that the science of health care is considerably farther advanced than its socioeconomics. Let us tackle these monumental questions in the context of what we can and should do in Mississippi. This is our proper concern as providers of care. Clearly, we are not now and never have been debating whether health services shall be rendered; we are discussing how this responsibility can best be carried out and what our legitimate interests are in taking on the job.

Half of the first question needs no answer, because somehow, in some way, every effort will always be made to care for all citizens, regardless of their ability to pay. How much care is a changing factor, largely dependent upon skilled manpower, institutional capacity, the delivery system, and the finances available.

President, Mississippi State Medical Association, 1966-67. Read before the House of Delegates, 99th Annual Session, Biloxi, May 15-18, 1967.

There was a time a little over a generation ago when this question was almost academic. Medical science then had much less to offer the sick and injured. We lacked most of the marvelous drugs we have today. We were not then knowledgeable and skilled in today's techniques of anesthesia and surgery. We did not then have the diagnostic tools nor the miracles in nuclear energy. Not only was our know-how far less developed than it is now

Calling the fragmented programs of medical care for the indigent in Mississippi a challenge for change, the 1966-67 president urges adoption of a medically-oriented Title XIX program for the state. Preservation of free choice and local initiative is inherent in this concept, the author says, as he points out that no reorganization of health care services is being sought from traditional patterns.

The theme of the presidential address is that we are all witnesses to a challenge for change and he who fails to respond to the challenge will not be a factor in the change.

but we also had less capacity to communicate, teach, and learn.

It was then simple enough, in economic terms, to provide a charity bed with the paying patient underwriting not only his own care but that in the charity ward as well. We did for both what we could.

In the mid-30's, our State Hospital Commission Act was passed by the legislature, and we began to pay the hospital \$2 a day in behalf of charity patients. About the same time, the pre-

payment and insurance mechanism of voluntary care financing began to develop. And the price of medical care began to inch up as new discoveries were made, because new and added services and skills meant more costs.

Today, this cost impact becomes heavier and heavier. Our hospitals and physician-employers feel the weight of the minimum wage laws. Construction, services, and supplies are caught in the upward spiral of mounting prices. And the continuing inflationary trend shows up in the picture.

After World War II, which accelerated knowledge and technology in nearly every field, we in medicine found ourselves able to do more but lacking the tools with which to do it. Tackling first things first, we built hospitals, and we have a proud record of this in Mississippi. We concentrated on training skilled manpower, and again, Mississippi responded with the State Medical Education Board program.

We were challenged in public health, and men like Felix Underwood wrote a chapter in Mississippi history which the passing of time will not dim. Finally, the state organized and constructed its great training institution at Jackson, the University Medical Center.

DELIVERY MEANS LACKING

In less than two decades, we committed ourselves to all we could in "how much care" and to every citizen when asked "for whom." We fell short in how it could be delivered.

As most states took advantage of the vendor medical titles for the aged, blind, disabled, and for families with dependent children, we did not. Instead, we continued to fragment our care for the indigent with a hodge-podge of programs. Some of them duplicated others; some were highly restrictive, while some were liberal; some were notably lacking in quality against others which demanded higher standards. We have not yet divorced ourselves from this shotgun approach, and now we are challenged with a reckoning.

With this reckoning is an opportunity. It is Title XIX, already implemented and made operational by 29 states. This extension of the Kerr-Mills principle makes it possible for a state to purchase needed medical care for those who have established and demonstrable financial need.

Title XIX unifies a state's effort in providing this care, and this direction toward unification is long over-due in Mississippi.

As recently as the 1966 regular session of our

legislature, we appropriated almost \$70 million for operation of 30 distinctly identifiable health care and health-related programs scattered among more than a dozen different agencies of the state. We are not suggesting that all or even most of this is a waste. Indeed, most was important and useful, but it goes without saying that it can be made much more effective.

PRIVATE CARE SUPPORTED

Apart from this fragmentation of services, the shredding of responsibility, and postponement of hard decision, we have simultaneously been concerned with the organization of health care services. We of the Mississippi State Medical Association have long believed—and we believe today—that the private health care pattern is the superior means for delivering services.

We believe in the exercise of choice by provider and recipient alike. We support local initiative. We find that individual exercise of professional judgment is consistently in the interest of the patient.

Moreover, the political and social history of our state clearly indicates to us of medicine that others feel the same as we. So, neither Title XIX nor any other law alters this deep conviction and assumption of professional and public responsibility. Happily, Title XIX is not intended to do this, because it is fundamentally a state program.

Our concern, then, is proved for all to see and understand in our state medical association's bringing these questions before our colleagues in health care and our leadership in local government. We will share the future we make for ourselves, or we will jointly suffer the consequences of inaction.

The important thing at the moment is that we can make a choice. Failing this, the choice will be made for us.

DO A BETTER JOB

So our second question is not asking that the organization of health care services be rebuilt along other lines and philosophies; it is only asking if we are sufficiently sound in our traditional distribution patterns to make them do a better job for more people. We are not committing the services of a single physician, dentist, nurse, hospital, allied institution, or individual.

Let us not cloud this central issue with irrelevant arguments.

For more than 10 years, our state medical association has said with candor that it is not a question of how the bill shall be paid but rather

one of who will do the paying. Then as now, we oppose direct federal programs, because they supplant rather than supplement while bringing the burden of inequity upon those who are paying the bill. To us, the extension of Title XVIII, Medicare for those over age 65, to younger age brackets is unthinkable. Yet, it is widely conceded that failure to make Title XIX work could ultimately result in such an action.

Remember also that the law leaves the content and operation of any soundly-conceived Title XIX program to the individual state, so much so, in fact, that no such program will come into being unless the legislature acts affirmatively to make it so.

Keep in mind the fact that Title XIX, once implemented, is administered under an agency of the state in behalf of the citizens of the state. And remember that anyone who receives care under a Title XIX program must be found needy under a test devised and approved by the state.

In the light of alternatives which are virtually assured, Title XIX offers us the most desirable course of action in providing comprehensive medical care for all citizens. One alternative, that of extending Title XVIII, has been discussed. Another is well-defined on the political horizon.

OEO PROGRAM

In the Economic Opportunity Act Amendments of 1966, the 89th Congress appropriated \$100 million for operation of 50 area and neighborhood health centers under the poverty program. The enactment actually funded eight of these centers: Boston, New York, the Bronx, two in Chicago, Denver, Watts in the Los Angeles area, and Bolivar County, Mississippi. The same legislation authorized but does not fund a total of 400 such centers. It should be kept in mind that no new legislation would be needed—only the money—to extend the OEO health center program to any state. While such a program probably carries the seeds of its own destruction, it is fully capable of disrupting established health care services for a significant period of time.

We must all put our shoulders to the wheel and clean up the mess of our shotgun, fragmented approach to health care for the needy in Mississippi. Programs of care must be equitable to all citizens in all regions of the state. For example, about 60 per cent of all patients in the four charity hospitals, each of which is located on or south of Highway 80, are from the counties where the institutions are located, but all counties pay the bill.

The three-way, \$5 million appropriation for the State Hospital Commission with its inadequate reimbursement rate to hospitals and statutory injunction against paying a physician anything, for the charity hospitals, and for the Cerebral Palsy Hospital School is not eligible for a cent of matching funds. Were just this amount alone matched under Title XIX, it would place almost \$28 million at our disposal for health care of the needy.

REAPPRAISAL NEEDED

Since 1964, we have advocated the state's making a searching reappraisal of its programs of care for the needy with the goals of improving both the quality and quantity of services and the elimination of duplications and inequities upon recipients, taxpayers, and the providers of care. With the advent of comprehensive health care planning by a state agency under a 1966 congressional enactment, we have the means to do this, and we believe that it should be undertaken without delay by those most qualified to do so, meaning medically-oriented people. Our Board of Trustees has recommended to Governor Johnson that the State Board of Health be charged with this task.

Let none gain the impression that the Mississippi State Medical Association is out to abolish and destroy. In fact, the record proves just the opposite, because we have helped to make the existing programs work. Let me give you two examples: When asked if it were our goal to abolish the State Hospital Commission, we pointed out that we gave written testimony in the 1966 legislature opposing its consolidation with the Commission on Hospital Care. The record also shows that we expended our own money and time in studying ways to make its program more effective and reached agreements in this connection with the commission.

We have been asked if we intended to destroy the charity hospitals, and we reply by pointing out our four year campaign to bring quality teaching programs to these institutions.

NO SACRED COWS

But we do say that no institution ought to be a sacred political cow if, in the opinion of the legislature, it can be improved or changed so that the citizens of the state may be better served. We will stand ready to give the full benefit of our experience and studies in this effort with the same measure of public spirit that has moved the medical profession to serve the old programs.

We are deeply concerned as to how a Title XIX

WITNESSES / Thompson

program would be conducted in Mississippi. It will be a duty and obligation of state government to designate the single state agency to administer the program. The enabling legislation will also contain authority for fiscal administration of the program, very likely the designation of a public or private agency to process claims, make payments, conduct studies, and render an accounting of its stewardship to the state.

We shall insist that the Title XIX fiscal administrator be able to command the trust and confidence of the medical profession, the hospitals, nursing homes, and all involved in furnishing services. The administrator must be medically-oriented and should furnish its services on a nonprofit basis.

And finally, any Title XIX program, as provided in law, must consolidate and improve our

local effort, for it will be our single major local effort. If, as has been stated, this means elimination of existing programs which would duplicate services or which would fall short of the state's getting the best return for its tax dollar investment, then let us move forward with the better opportunity.

We are the witnesses to a vital era when the socioeconomics of medicine is changing to match progress in medical science. Almost no practical, realistic man can hold as tenable the growing gap between scientific capability and delivery capacity.

One way or another, this gap is going to be closed. At the moment, the several states hold the cards, and 29 have acted to exercise their prerogatives.

This is a challenge for change, and I believe that he who fails to respond to the challenge will not be a factor in the change. ★★★

633 Park St. (39563)

HONEST BILL, THE BIBLIOPHILE

Sign in a California bookstore window: "Used books for sale. All were formerly owned by a little old lady in Pasadena who never read faster than 40 words per minute."

Case Report XIII

Of Maternal Mortality Study

RALPH L. BROCK, M.D.
McComb, Mississippi

THE FOLLOWING CASE REPORT represents death from puerperal sepsis and puerperal pulmonary embolus.

CASE NO. 499-04710-66

A 33-year-old, white female patient, gravida IV, para III, first reported for prenatal care in October 1965. Her expected date of delivery was established as May 25, 1966. Prenatal visits were made at regular intervals and all findings remained within normal limits. Her blood was Type O, Rh Positive, and a fetal x-ray on May 15, 1966, showed a normal cephalic presentation.

The patient was admitted to the hospital on May 23, 1966, because of intermittent lower abdominal contractions. Examination on May 24, 1966, revealed a cervix that was dilated 3 to 4 cm., the head was high and there was no evidence of sustained labor. Early on the morning of May 25, 1966, there was a spontaneous rupture of the membranes and examination at this time revealed a marginal placenta praevia on the posterior one-third of the cervical margin, and there was a small amount of vaginal bleeding noted. Blood was obtained for possible future loss replacement, and a telephone consultation was obtained with an obstetrician who advised stimulation of labor with a Pitocin drip to permit vaginal delivery and try to avoid a cesarean section. Prophylactic doses of Panalba capsules were started the same morning the membranes ruptured, and procaine penicillin was given I.M. the same day.

An infusion of 1,000 cc., 5 per cent glucose in distilled water with 10 min. of Pitocin added was started at 10:15 a.m. on May 26. Regular contractions were noted by noon and sustained labor followed. A live male infant was delivered at 4:30

p.m. with the aid of low forceps and a small medio-lateral episiotomy. The placenta was delivered intact and approximately one-half of the placenta showed evidence of premature separation. The baby did well. Approximately 30 minutes after the delivery, the patient began having a chill and the temperature rose to 103.6°F; the blood pressure became unstable and an increased amount

The patient in this case report is a 33-year-old white female, gravida IV, para III, who died three days following delivery. She was diagnosed as being in septic shock which had seemingly been brought under control when sudden death from an apparent embolism occurred. The committee discusses the case, rating it as non-preventable and commending the attending physician.

of vaginal bleeding was noted. At 5:30 p.m. the blood pressure was recorded at 90/60 and pulse rate 160 per minute.

An infusion containing one gram of Chloromycetin, 100 mg. Solu-Cortef and 2 million units of aqueous penicillin was started. At 5:45 p.m. it was necessary to add Levophed to the infusion to maintain blood pressure. Intravenous cannulas were placed in both legs. At 5 p.m., 500 cc. blood was started and at 6:10 p.m., 8 million units of aqueous penicillin was added. Consultation with an internist was obtained at 7 p.m. who agreed that the patient was in septic shock and recommended continued use of Chloromycetin and large doses of aqueous penicillin with increasing doses of Solu-Cortef to 400 mg. per eight hours and the addition of Polymyxin-B in the intravenous fluids.

General practice member, Committee on Maternal and Child Care.

MATERNAL MORTALITY / Brock

A second 500 cc. of blood was started at 8 p.m. and Levophed infusions continued to be necessary to maintain the blood pressure between 80 and 100 systolic. After further consultation, the use of peripheral vasodilators was considered and put into effect by giving Thorazine, 12½ mg. intravenously at 9 p.m. which resulted in an improvement in urinary output and a more stable blood pressure. Urinary output between 11 o'clock and 12 o'clock was 17 cc., between 12 and 1 a.m. was 10 cc., and between 1 and 3 a.m. was 25 cc. Total urinary output for the eight hours was 191 cc.

Very little vaginal bleeding was noted during the night, and by 6 a.m. on May 27, the urinary output had increased and the Levophed requirements had dropped. During the initial 12 hours after delivery, the patient received the following: 250 cc. of intravenous fluids, 1,500 cc. whole blood, 20 million units of aqueous penicillin, 1,000 mg. Solu-Cortef, 2 gm. Chloromycetin, 2 gm. Staphcillin, 100 mg. Polymyxin-B, and 75 mg. Coly-Mycin. On the morning of May 27 the blood pressure was maintained at 90/60, the pulse had reduced to 120 per minute and the urinary output was noted to be increasing. The patient continued to receive Solu-Cortef, Coly-Mycin, aqueous penicillin, Staphcillin, Chloromycetin, Crysticillin and digitoxin.

BLOOD AND IV FLUIDS

During the eight hours between 7 a.m. and 3 p.m. she received 500 cc. whole blood and 650 cc. intravenous fluid, and the urinary output was 150 cc. Vaginal bleeding was recorded as being "very little." At this point the hemoglobin was 9.7 gm., hematocrit 26 per cent, WBC 27,500, and the urinalysis showed a 4+ albumin, 2+ sugar and 35 to 40 RBC/HPF. During the eight hours from 3 p.m. to 11 p.m. on May 27, a total of 400 cc. intravenous fluids were administered; there continued to be very little vaginal bleeding and the urinary output had increased to 192 cc. Blood pressure ranged between 90 and 100 systolic and the pulse rate had reduced to 104 per minute. Between 11 p.m., May 27 and 7 a.m., May 28, the patient regained consciousness, the blood pressure stabilized, and the pulse rate was 90 per minute.

At 7 a.m. on May 28 the temperature was normal, the WBC was 18,000, and pulse rate was 80 per minute. The Levophed solution was discontinued, and the blood pressure remained stable. She began taking liquids by mouth and seemed to

be much improved. All of this time the patient had remained in the delivery room and at 10 a.m. she was moved back to her regular room in what appeared to be good condition. She drank coffee and water at approximately 11 a.m. The pulse rate at 1 p.m. was 80 per minute and the blood pressure was 94/64. At 12:30 p.m. the patient complained of some pain in her back, arms, and legs and at 2 p.m. she was nervous and complained of abdominal pains and was given Demerol 50 mg. I.M. At 2:10 p.m. the patient complained of being hot and having pains in her chest. She suddenly turned cyanotic, her blood pressure disappeared and failed to respond to resuscitation. An autopsy was not obtained. Culture of the lochia in 48 hours grew a gram-negative rod of the *Escherichia Coli* type.

CASE REVIEW

This case was reviewed anonymously in the usual manner by a member of the MSMA Committee on Maternal and Child Care and discussed at a regular quarterly meeting of the committee. The adequacy of the information was rated as 4 on a scale of 1 to 5, in that detail reports were available and only the report of an autopsy was missing. Taking into consideration ideal standards of patient cooperation, medical knowledge, and hospital facilities, the committee felt that death in this case was non-preventable. Further it was the wish of the committee that the attending physician be commended for the excellent care that the patient received.

The committee felt that this death was due to infection resulting from the puerperal reproductive tract and possible puerperal pulmonary embolus. Comments on the management of this case are included in the following paragraphs.

It was noted that prophylactic doses of antibiotics were started after there was spontaneous rupture of the membranes before active labor had begun. When examination revealed a marginal placenta praevia, vaginal delivery was made possible through the use of a Pitocin drip, and a cesarean section was avoided. It was also noted that possible blood loss was anticipated, and preparations were made in advance for adequate blood supply should an emergency arise from the placenta praevia.

SEPTICEMIA SYMPTOMS

When the first symptoms of septicemia were apparent shortly after delivery, the possibility of gram-negative shock was considered and immediate treatment was begun. Particular attention was given to the use of large doses of corticosteroids

and broad spectrum antibiotics and meticulous attention to urinary output. It was also noted that a peripheral vasodilator in the form of Thorazine given intravenously was correctly used and resulted in an improvement in urinary output and a more stable blood pressure. It seemed from reading the case report that treatment for the septic shock had been successful when sudden death from an apparent embolism occurred.

One suggestion came from the committee's discussion made reference to the use of intravenous cannulas in seriously ill patients where large doses of medicines are used which may possibly cause localized thrombophlebitis. It was suggested that in such cases a cannula be inserted in the femoral veins and pushed high enough to reach the vena

cava. At this level potentially irritating substances will be greatly diluted and be less likely to cause localized phlebitis.

SUMMARY

1. A case of maternal death from puerperal pulmonary embolus due to infection from the puerperal reproductive tract is discussed.

2. The attending physician was commended for prompt and adequate treatment given this patient.

3. The use of femoral vein cannulas extending into the vena cava is suggested where large doses of potentially irritating medicines are to be given.

★★★

320 Delaware Ave. (39648)

OTHERWISE ETHICAL

The elderly male patient was being seen by a consultant, but the attending physician was not present.

"Did Dr. Jones take your pulse?" asked the specialist.

"I don't think so," responded the patient. "The only thing I've missed since coming to the hospital has been my watch."

Radiologic Seminar LXIII: Pectus Excavatum

THOMAS SCOTT MCCAY, M.D.
Jackson, Mississippi

PECTUS EXCAVATUM, also known as funnel chest, is characterized by a posterior displacement of the lower sternum and its attached costal cartilages. The extent of the deformity varies from a slight depression of the sternum to a deep funnel with significant narrowing of the AP diameter of the chest.

The primary defect is usually thought to be a congenitally short central tendon of the diaphragm, and as the individual grows, this produces the sternal depression. Not all cases appear to originate in this manner, however. Tracheal obstruction, delayed ossification, deficiency states, and heredity have all been implicated as causative factors. The condition is generally first noted at birth or shortly thereafter and as the individual grows, the defect becomes more obvious. Males are more frequently affected than females. Apart from cosmetic effects and perhaps associated psychological effects, there may be physiological effects due to displacement of the heart and impaired ventilatory ability of the lungs.

A number of surgical procedures have been advocated for correction of this deformity, but discussion of these procedures is outside the scope of this article and the reader is referred to Gross' book, *The Surgery of Infancy and Childhood*¹ for details.

X-ray findings are interesting to say the least, and may prove embarrassingly confusing if the reader is not aware of the history or alert to the radiological findings. There are seven findings which are associated with this deformity. The first

six apply to the frontal projection and the seventh to the lateral view. These findings are:

1. Displacement of the heart to the left.
2. Pseudocongenital heart sign, with straightening of the left heart border produced by rotation of the heart on its long axis.
3. Sharp downward angulation of the anterior ribs.
4. An indistinct right heart border due to this border lying over the spine.
5. Pseudopneumonia sign adjacent to the spine in the right lower chest due to density of compressed lung and the tangential view of the chest wall.
6. Spine sign due to displacement of mediasti-

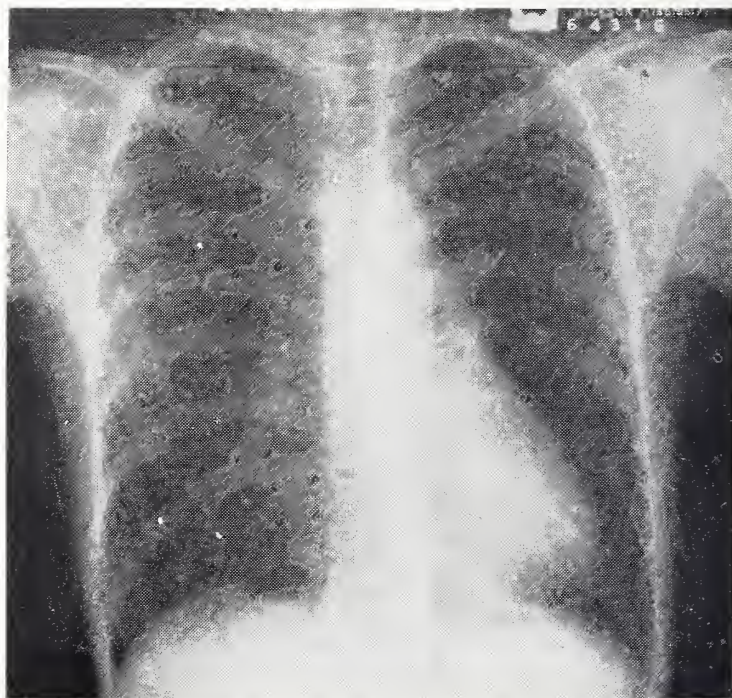


Figure 1. Erect posteroanterior chest radiograph demonstrating the first six findings associated with pectus excavatum.

Sponsored by the Mississippi Radiologic Society.
From the Department of Radiology, University of Mississippi School of Medicine.

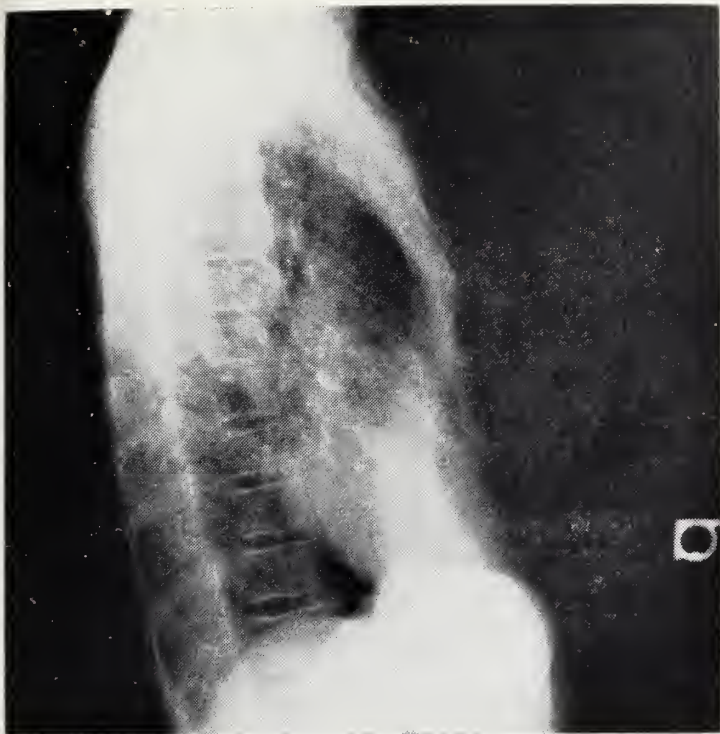


Figure 2. Left lateral chest radiograph of the same patient showing the degree of sternal indentation.

nal contents to the left, resulting in clearer visualization of the retrocardiac portion of the spine than the portion behind the arch of the aorta.

7. Sternal indentation on the lateral view.²

The presented radiographs of a 13-year-old male are thought to demonstrate all seven of the above findings. While all of these findings are not invariably present in any one case, a lateral view will establish the diagnosis, if, on the frontal study, there is any question in the interpreter's mind.

★★★

REFERENCES

1. Gross, R. E.: The Surgery of Infancy and Childhood, Philadelphia and London, W. B. Saunders Company, 1955, pp. 753-761.
2. Brodeur, A. E.: Radiologic Diagnosis in Infants and Children, St. Louis, The C. V. Mosby Company, 1965, pp. 111-112.
3. Meschan, Isadore: Roentgen Signs in Clinical Practice, Philadelphia and London, W. B. Saunders Company, 1966, Vol. 2, pp. 790-791.
4. Ravitch, M. M.: The Operative Treatment of Pectus Excavatum, Ann. Surg. 129:429, 1949.

2500 North State St. (39216)

THREE RING CIRCUS

The prospective bridegroom sauntered into the jewelry store and announced: "I'd like to look at a ring."

"How about our special three piece combination?" asked the jeweler.

"What's that?" queried the young man.

"Engagement, wedding, and teething."



The President Speaking

'Home Health Services'

TEMPLE AINSWORTH, M.D.

Jackson, Mississippi

HOME-CENTERED PROGRAMS of patient care are receiving increased attention from medical practitioners and all members of the health care team. The advent of "home health services" financing under Medicare tended to remind many that this long-established care pattern isn't obsolete at all and has a place of increasing importance in the realm of medical practice.

The changing composition of the American population with its concomitant and proportionate increase in the incidence of long-term illness is placing heavy pressures on chronic care facilities. Only now are new nursing home beds becoming available in significant numbers, and most concede that as much as a decade may pass before construction and staffing of these facilities can realistically meet the upward surging need. Moreover, the pressures for this care are accelerated in terms of purchasing power through Medicare and other programs of health services for the aging. Nor should long-term care for those under age 65 be dismissed.

Medicine recognizes that intermittent nursing care, physical therapy services, homemaker health aid services, and other home-centered management measures not only contribute to better care for the chronically ill patient but also extend the care capabilities of the busy physician.

Home health care is nearly as old as the nation, the first such program having been organized by the Boston Dispensary in 1796. But, according to Dr. Charles C. Edwards of the AMA Council on Medical Service, "the gap between need and availability is greatest in the comprehensive, coordinated home care programs which provide a wide range of physician-directed medical, nursing, and supportive services."

Our state medical association has taken official note of privately sponsored home health service agencies and of those under public health sponsorship. It is a trend of importance to physicians and those whom they serve. ★★★

Constitution and By-Laws of the Mississippi State Medical Association

CONSTITUTION

Preamble

That more may live longer in the richness and comfort of health; that pain, suffering, and disease may be eradicated to the extent made possible by scientific medical knowledge; that the standards of the medical profession may be maintained on the highest plane of honor, we dedicate ourselves as physicians through this Association. Among us, membership is a privilege, earned by professional qualification, personal honor, and selfless service; it is not a right vested superficially nor by statutory licensure. Truth shall be our quest; diligence, our staff; and service, our purpose.

Article I

NAME OF THE ASSOCIATION

The name and title of this Association shall be the Mississippi State Medical Association.

Article II

PURPOSE OF ORGANIZATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Mississippi and to unite with similar associations in other states to form the American Medical Association, with a view toward the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws, to the promotion of friendly intercourse among the physicians and to guarding and fostering of their opinion in regard to the great problems of medicine, so that the profession shall become more honorable and capable within itself, and more useful to the public in the prevention and care of disease, and in the prolonging of and adding comfort to life.

The purpose of this Association shall be to promote scientific medical research and practice and it shall be a non-profit organization.

Article III

COMPONENT SOCIETIES

Component Societies shall consist of those societies which hold charters from the Association.

Article IV

MEMBERSHIP

Section 1. Members of the Mississippi State Medical Association. Members shall be active, associate, or emeritus, according to requirements and provisions of the By-Laws. There may also be invited guests. Membership other than associate shall be construed as active in connection with the rights and privileges accruing therefrom.

Section 2. Guests. Any physician not a resident of the state may become a guest during any annual session upon invitation of a member of the Association, and

shall be accorded the privilege of participating in all the scientific work of that session.

Article V

SESSIONS AND MEETINGS

Section 1. The Association shall hold an annual session during which there shall be held daily not less than two general meetings, which shall be open to all registered members and guests.

Section 2. The time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix, or change, either the time or the place, or both of the annual session.

Article VI

GENERAL OFFICERS

Section 1. The general officers of this Association shall be a President, President-elect, three Vice-Presidents, one from each Supreme Court District, Secretary-Treasurer, Speaker, Vice Speaker, and Editor.

Section 2. The President, President-elect, and Vice-Presidents shall hold terms of one year. The Secretary-Treasurer, Speaker, Vice Speaker and Editor shall be elected for terms of three years.

Section 3. The officers of this Association shall be elected by the House of Delegates on the last day of the annual session following the adjournment of the general meeting, but no person shall be elected to any such office who has failed to attend two-thirds of the past two and current annual sessions and who has not been a member for the past two years.

Section 4. In addition to these general officers, there shall be an Executive Secretary who need not be a physician or member of the Association. He shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. His compensation and expenses for duties performed shall be fixed by the Board of Trustees and confirmed by the House of Delegates.

Article VII

EXECUTIVE OR CENTRAL OFFICES

The Executive Secretary shall maintain in the city of Jackson suitable offices for the discharge of his duties and for conducting the administrative affairs of the Association.

Article VIII

HOUSE OF DELEGATES

The House of Delegates shall be the legislative, business, and policy-making body of the Association and shall consist of (1) delegates selected by the component societies under authorized apportionment, (2) the general officers of the Association, (3) all past presidents, provided they still be members in good standing of the Association, (4) members of the Board of Trustees and Councils, and (5) elected committees, Delegates and Alternate Delegates to the American Medical Association, members of the State Board of Health, and members of the Board of Trustees of Mental Institutions, all of whom must be members of this Association.

CONSTITUTION / Continued

Article IX

BOARD OF TRUSTEES

The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates and shall perform such duties as are prescribed by law governing directors of corporations and in the By-Laws of the Association. The Board shall consist of nine members, one from each Association District, elected for terms of three years each. A Trustee shall not serve more than three consecutive terms.

Article X

FUNDS AND EXPENSES

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by annual dues, per capita assessments upon the membership, and by voluntary contributions. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, publications, and for any other purpose approved by the House of Delegates.

Article XI

THE SEAL

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII

AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been sent officially to each component society at least two months before the session at which final action is taken.

BY-LAWS

Chapter I

MEMBERSHIP

Section 1. Eligibility. Each component society of the Mississippi State Medical Association shall judge the qualifications of candidates for election to membership therein, which shall be restricted to those persons who hold the degree of Doctor of Medicine from an appropriately accredited source as defined by the American Medical Association, or in lieu thereof, a foreign degree in medicine which is an acceptable equivalent to the Board of Trustees and shall be a citizen of the United States. All candidates for any degree of membership other than associate must be legally licensed to practice medicine in Mississippi. Persons who obtained this degree prior to January 1, 1917, need not comply with this requirement but must be licensed to practice medicine in Mississippi or, if offering to practice in Mississippi must be eligible for license by reciprocity and be a member in good standing of a constituent (state) association of the American Medical Association. Membership in a component society, evidenced by the payment of dues for the current year, shall be a prerequisite to membership in the Association, except that a physician upon his initial application for membership in a component society of the Association shall be required to undergo a waiting period of ninety (90) consecutive days from the date he begins the practice of medicine in the geographical area of the component society before he may be elected to membership in the component

society. No physician shall be eligible for membership who has been convicted of or who has plead guilty to either a felony or a violation of a state or federal narcotics law. The duly certified court record shall be *prima facie* evidence of pleas and convictions and cause automatic revocation of membership. No physician shall be eligible for election to or continuation of membership who does not possess a currently effective federal narcotics stamp, provided, however, that physicians in full time government service who need no registration to use, prescribe, and dispense narcotic drugs and those who, by reason of type of practice, employment, inactivity, or retirement, neither prescribe nor dispense narcotics and who for this reason alone have not applied for registration shall be exempt from this requirement.

Section 2 (a). Good Standing. Only those members in good standing shall be entitled to the rights and privileges of membership. A physician not in good standing may not be elected to office nor exercise the privilege of voting or attending any session of this Association, scientific or otherwise. The name of a physician upon the properly certified roster of a component society which has paid its annual assessment shall be *prima facie* evidence of his right to register at the annual session of the Mississippi State Medical Association. No member shall participate in any of the proceedings of the annual session until he is duly registered. No delegate or other member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section. (b) Change of State Residence. In the event that a member moves from the State, his membership shall continue until, and lapse at the end of, the current fiscal year, but this provision shall not operate to prevent a physician who moves from the state continuing his membership by payment of all dues and assessments to the state Association. (c) Obligations of Membership. When the Executive Secretary of the Mississippi State Medical Association is officially informed by the secretary of a component society that a physician is not in good standing in the component society, he shall remove the name of the physician from the rolls of the Association. A member shall hold his membership through the component society in the jurisdiction of which he practices, provided that a physician living on or near a county line may hold membership in the society most convenient for him to attend. If the society in which he chooses to secure membership does not exercise jurisdiction over the area of his residence, then permission must be obtained from the jurisdiction society to facilitate his affiliation with the extra-jurisdiction society.

Section 3. Degrees of Membership. Members of the Mississippi State Medical Association shall be divided into the following classifications: Active, emeritus, and associate. (a) Active Membership. Active members shall include all eligible members of component societies in good standing, providing that all dues and assessments in this Association as may be hereinafter prescribed have been received by the Association. (b) Emeritus Members. Any members of the Mississippi State Medical Association who has been an active member for any ten consecutive years and shall have permanently retired from the practice of medicine shall be eligible for election to emeritus membership. Election to emeritus membership for reason of retirement in the case of permanent and total disability shall merit special consideration but shall be subject to ruling by the Board of Trustees. Election to emeritus membership shall be based on the recommendation of the component society and the approval of the Board of Trustees. (c) Associate Membership. Any commissioned medical officer in the United States Army, United States Air Force, United States Navy, or United States Public Health Service, or any physician in the employ of the Veterans Administration, not licensed to practice in the State of Mississippi, stationed in Mississippi, members of medical faculties of medical schools in Mississippi, approved by

the American Medical Association, who are not licensed to practice in the state, any hospital intern, or any hospital resident in Mississippi, may, on election to associate membership by the component society in whose jurisdiction the physician resides become an associate of the Mississippi State Medical Association. Associate members shall not vote or hold office.

Section 4. Dues and Assessments. A per capita assessment determined by the House of Delegates shall constitute the dues of the Association, which assessment shall be collected from all active members by the respective secretaries of the component societies, provided that new members shall be accepted on payment of three-fourths of annual dues after May 1 and one-half of annual dues after September 1. Each active member shall pay the prescribed dues to the officer designated by the component society for transmittal to the Executive Secretary of the Association. Dues shall include a subscription to the official publication of the Association. (a) Members Excused From Payment. The Board of Trustees may, by majority vote, excuse a member from payment of dues because of undue hardship or similar circumstances warranting special consideration provided that the component society shall have excused in full the payment of dues for periods exceeding one year. Such circumstances shall be interpreted to include extended illness and temporary disability. (b) Emeritus Members. Physicians who have been elected emeritus members shall not be required to pay dues in the Association. (c) Payment of Dues and Delinquency. Dues of the Association are due and payable on December 31 of the year prior to that for which dues are prescribed. Failure to pay dues by April 1 of the year for which due shall result in forfeiture of membership privileges and the removal of the member's name from the rolls of the Association. A five dollar (\$5.00) reinstatement cost shall be assessed against any member who is delinquent by reason of non-payment of dues after April 1 of the year for which dues are payable. A member in good standing who is called to active duty with the Armed Forces of the United States other than in the regular component shall be carried as an active member without payment of dues until such time as he is released from military service; receipt of publications of the Association during such period shall be at the expense of the member.

Section 5. American Medical Association. Members of this Association shall pay the dues or hold a legal exemption from the dues of the American Medical Association. These dues shall be paid through the component society to the Executive Secretary of the Mississippi State Medical Association, whose duty it shall be to transmit them to the American Medical Association and to obtain proper credits and receipts therefor.

Section 6. Revocation of Emeritus or Associate Membership. Any emeritus or associate membership may be revoked by two-thirds vote of the House of Delegates when, in the opinion of the House of Delegates, the conduct or actions of the emeritus or associate member violates any of the principles of the code of ethics or whose conduct or actions are not becoming to the honor conferred.

Chapter II

ANNUAL AND SPECIAL SESSIONS

Section 1. Time and Place. An annual session shall be held as required by Article V, Section 1, the Constitution of the Mississippi State Medical Association, which session shall in any event be held prior to the annual session of the American Medical Association. The place of the state session shall be fixed in accordance with Article V, Section 2, the Constitution of the Mississippi State Medical Association.

Section 2. Special Session. A special session of the Association or of the House of Delegates may be called by the President, with the approval of the Board of Trustees. The Board of Trustees is empow-

ered to call a special session by majority concurrence.

Section 3. Inviting an Annual Session. A component society desiring the Association and House of Delegates to meet in annual session in a city within its jurisdiction may submit an invitation in writing or verbally through its representative to the House of Delegates at the annual session concerned with the selection of the site for the next regular scheduled meeting. The dates and site of the annual session selected may be changed by majority vote of the Board of Trustees in an emergency requiring such a change.

Section 4. Registration Privileges. Only the following shall be permitted to register at any session:

- (a) Active members
- (b) Emeritus members
- (c) Associate members
- (d) Invited guests
- (e) Medical students of American Medical Association approved medical schools who are certified to the Executive Secretary of the Association by their respective deans.
- (f) Interns and residents who are graduates of American Medical Association approved medical schools and who are connected with an approved hospital and who are certified to the Executive Secretary of the Association by their respective hospital superintendents in event they are not associate members of the Association.
- (g) Commissioned medical officers of the United States Armed Forces who are on active duty and who if not associate members are certified to the Executive Secretary by their Post or Base Surgeons or Commanding Officers.

Section 5. Indebtedness. A member shall not be permitted to register unless all current indebtedness to both the Association and component of proper jurisdiction has been paid.

Section 6. Admittance. Admittance to any meeting of the House of Delegates, any scientific section, or any of the various exhibits at an annual session of the Association shall be limited to members in good standing, duly registered and invited guests, members in good standing of the Woman's Auxiliary to the Mississippi State Medical Association, duly accredited and registered members of the Press, and accredited technical and scientific exhibitors.

Chapter III

GENERAL MEETING

Section 1. Participation. The general meeting shall include all registered members and guests, who shall have equal rights to participate in the proceedings and discussions, but no member shall vote on any question coming before a section of the general meeting except those who have registered as members of such sections. Each section of the general meeting shall be presided over by its chairman. The address of the President and the Distinguished Service Oration shall be delivered before the general meeting at such time and place as may be arranged.

Section 2. Order. The order of exercise, papers, and discussions as set forth in the official program shall be followed from day to day until it has been completed. But no section shall be allowed to place more than five papers on its program, nor more than two invited guest essayists (out-of-state or non-member). When a section program is not completed within the time assigned, it shall not be allowed to continue into that assigned to another section.

Section 3. Time Restrictions. No address or paper before the Association, except those of the President and Orator, shall occupy more than twenty minutes in its delivery, except that guests may be allowed thirty minutes; and in formal discussion no one shall speak more than five minutes; and in informal discussion no one shall speak more than three minutes and not more than one time.

BY-LAWS / Continued

Section 4. Essayists. With the exception of the invited guests, the essayists must be members of the Association. No name shall appear more than once on the printed program to discuss a paper before the regular scientific sections unless such person qualifies for membership as provided in these By-Laws.

Section 5. Papers. All papers read before the Association shall be its property. Each paper must be read by its author, and must be deposited with the Secretary when read.

Section 6. Failure to Read Paper. No author listed on the program who fails to read a paper at the session may be allowed a place on the program of the next annual session, but if the author, being unable to attend, shows his good intent by forwarding his paper to the Secretary before the annual session, he shall not suffer the penalty.

Chapter IV SCIENTIFIC SECTIONS

Section 1. Designation of Sections. The scientific sections of the Association shall be as follows: (a) Section on Medicine, (b) Section on Surgery, (c) Section on Preventive Medicine, (d) Section on Eye, Ear, Nose and Throat, (e) Section on Pediatrics, (f) Section on Obstetrics and Gynecology, and (g) Section on General Practice.

Section 2. Section Officers. Each scientific section of the Association shall, as the last order of business during its regular meeting, elect a chairman who shall serve for a period of one year. A majority of votes cast shall be necessary to elect. Additionally, each section shall elect a secretary whose term of office shall be for a period of three years and so arranged that secretaries shall be elected by their respective sections at the same annual meeting as follows: (1) Sections on General Practice and EENT, (2) Sections on Obstetrics and Gynecology and Preventive Medicine, and (3) Sections on Pediatrics, Surgery, and Medicine.

Section 3. Program. The Council on Scientific Assembly shall place any paper in its proper section. The Council shall so arrange the program that no one section shall be given precedence over others two years in succession.

Chapter V HOUSE OF DELEGATES

Section 1. Apportionment and Representation. Each organized county shall be entitled to representation in all regular and special sessions of the House of Delegates, one delegate and one alternate for each fifty members in the county and one delegate and one alternate for each fraction thereof, but each organized county holding a charter from this organization having made its annual report and paid its assessments, as provided in this Constitution and By-Laws shall be entitled to at least one delegate and alternate, said alternate delegates to act only in the absence of the delegate or delegates from the respective counties. No county in a component society shall be without representation in the House of Delegates; each shall be entitled to one delegate and one alternate without regard to total membership. No alternate may be seated at any regular or special session of the House of Delegates unless the delegates elected from that county shall be absent or otherwise unable to participate in the proceedings. In the event that neither the delegate nor the alternate is able to attend the regular or special session to which they have been accredited, then any *bona fide* resident of the county may, if properly registered, qualify himself as a delegate. No representative of the component society shall be seated in the House of Delegates until all his dues, assessments, and obligations to the component society have been paid. Delegates and alternates shall be elected by their re-

spective component societies for terms of not less than two years and shall assume office on the first day of the annual session following their elections; they shall be *bona fide* residents of the counties which they represent. Their names shall be reported to the Central Office of the Association not later than thirty days prior to the first day of the annual session. Representatives of component societies shall be seated in the House of Delegates only following their proper registration of credentials from the component societies they represent.

Section 2. Meetings and Attendance. The House of Delegates shall meet annually on the first day of the annual session of the Association. The House of Delegates shall meet for the conclusion of business on the last day of the annual session immediately following the adjournment of the last general or scientific session, provided that these requirements shall not operate to prevent such other meetings of the House of Delegates during the annual session as the House itself may order or the President or Speaker may deem necessary, but no such meetings may be called at times which would conflict with the scheduled general or scientific session. Duly registered members and guests may attend all meetings of the House of Delegates provided that they occupy a distinctly separate section of the meeting hall or auditorium and further provided that they shall not be permitted to participate in any phase of the meeting of the House of Delegates except on invitation of that body. By majority vote, the House of Delegates may enter into executive session, during which time only qualified delegates and officers of the Association may remain in attendance.

Section 3. Quorum. A three-fifths majority of registered and duly seated delegates of this Association shall constitute a quorum.

Section 4. Order of Business. The order of business shall be conducted at the pleasure of the House of Delegates, provided it shall not be in conflict with either these By-Laws or the Constitution. Meetings shall be conducted according to *Robert's Rules of Order, Revised*, and within the bounds of courtesy and this Constitution and By-Laws. Generally, the order of business shall be:

- (1) Adoption of the Transactions of the previous meeting.
- (2) Reports of Boards, Councils and Committees.
- (3) Reports of Presidential Committees.
- (4) Special Orders.
- (5) Unfinished Business.
- (6) New Business.

Section 5. Memorials and Resolutions. No memorials or resolutions shall at any time be issued in the name of the Mississippi State Medical Association by any officer or member thereof until such memorial or resolution has been approved and adopted by the House of Delegates or Board of Trustees.

Section 6. Duties and Responsibilities. It shall, through its officers and otherwise, give diligent attention to foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping stone to future ones of higher interest. It shall consider and advise the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto. It shall make careful inquiry into the condition of the profession of each county in the state, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in the counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county in the state has been brought under medical society influence. It shall encourage post-graduate work in medical centers, as well as home study

and research, and shall endeavor to have the results utilized and intelligently discussed in the component societies. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, the term of office to begin on January 1 of the year following that of the elections and continuing for two successive years. It shall, upon recommendation of the Board of Trustees, provide and issue charters to counties organized to conform to the spirit of the Constitution and By-Laws.

Section 7. Reference Committees. Business brought before the House of Delegates will normally be referred by the Speaker for hearing, debate, and recommendation to a reference committee. Sufficient reference committees shall be appointed by the President to expedite and assist in the deliberations of the House of Delegates. Such committees shall consist of not less than three nor more than five members, all of whom shall be members of the House of Delegates, who shall serve only during the regular or special session for which appointed. Any member of the Association shall have the privilege of appearing before a reference committee on any issue being considered. Additionally, reference committees may permit the appearance of any individual who, in the opinion of the committee, can assist its deliberations.

Chapter VI ELECTION OF OFFICERS

Section 1. Ballot. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

Section 2. Nominations. The House of Delegates on the first day of the annual session shall select a Committee on Nominations consisting of nine members of the House of Delegates, one from each Association District. It shall be the duty of this committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the state for the ensuing year shall be carefully considered. The committee shall nominate to the House of Delegates three names for each general officer vacancy and two names for all other offices. No two candidates for President-elect may be named from the same county. Nominations for appointment to membership on the Mississippi State Board of Health shall be made by the House of Delegates in accordance with Section 7024, Mississippi Code of 1942, provided that six names shall be submitted, three of whom shall be elected and their names submitted to the Governor as nominees from each district, provided no member shall be nominated who has served two consecutive terms. The House of Delegates shall nominate five physicians when vacancies occur on the Board of Trustees of Mental Institutions which nominations shall be submitted to the Governor in accordance with law.

Section 3. Report of Nominations. The House of Delegates shall receive the report of the Committee on Nominations and elect officers, Trustees, and Council members on the last day of the annual session.

Section 4. Nominations from the Floor. Nothing in this Chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Section 5. Executive Secretary. The Board of Trustees shall select and appoint an Executive Secretary as elsewhere prescribed in the Constitution and By-Laws of the Association.

Chapter VII DUTIES OF OFFICERS

Section 1. President. The President shall have general supervision over all meetings of the various bodies of the Association, shall appoint all committees not otherwise provided for, shall deliver an annual address at such time and place as may be arranged, and shall perform

such other duties as custom and parliamentary usage may require. He shall fill by appointment all vacancies occurring during his tenure of office among the general officers and on the Board of Trustees and Councils and shall be empowered to appoint such committees on an *ad hoc* basis as may be desired or required to conduct the affairs of the Association. He shall be an *ex officio* member of all Councils and committees. He shall be the real and acknowledged head, as well as the personal representative, of the medical profession of the State of Mississippi during his term of office, and insofar as practicable, shall visit by appointment the various sections of the state and the component societies of the Mississippi State Medical Association and assist the Trustees in their tasks of aiding and strengthening the component societies and in making their work more useful.

Section 2. President-elect. The President-elect shall be in charge of the work of organization, including membership, under the direction of the President, and shall exercise these duties and advise with the Vice Presidents and with the Board of Trustees in this phase of their activity. He shall be an *ex-officio* member of all Councils and committees. He shall succeed to the presidency upon the event of the death, resignation, or removal from office of the President. This automatic succession shall not operate to disqualify him from serving the next regular term of office unless he has served more than six months as President.

Section 3. Vice Presidents. The Vice Presidents shall assist the President in the discharge of his duties. They shall further assist the President-elect in the work of organization, including membership in their respective areas, and in promoting the welfare of the Association and the profession of the state.

Section 4. Speaker. A Speaker shall be elected for a term of three years. This officer may be chosen from the membership of the Association, irrespective of any affiliation with the House. The Speaker shall familiarize himself with the rules and usages of parliamentary procedure, with the laws of the House. On him shall devolve the duty of bringing before the House through the various officers and chairmen all reports and other matters that are to receive its attention. He shall preside at all meetings of the House and perform the duties usual to the position and office of chairman except in the appointment of committees, which shall be the privilege of the President.

Section 5. Vice Speaker. A Vice Speaker shall be elected for a term of three years to run concurrently with that of the Speaker. The Vice Speaker shall assist the Speaker in all duties prescribed in these By-Laws.

Section 6. Secretary-Treasurer. The Secretary-Treasurer shall be elected for a term of three years. He shall perform such duties ordinarily devolving on a secretary of a corporation by law, custom, or parliamentary usage and shall enjoy the rights and perform such other duties as may be granted or imposed in the Constitution and these By-Laws. He may delegate such duties as are herein described to the Executive Secretary who shall be responsible therefor. He shall be an *ex-officio* member of all Councils and committees.

Section 7. Executive Secretary. The Executive Secretary shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. He need not be a member of the Association nor a physician. He shall maintain a Central Office for the Association and shall be responsible for the management and proper functioning of the Central Office to the President of the Association and the Board of Trustees. He shall attend all sessions and meetings of the Association, the House of Delegates, the Board of Trustees, and shall serve at all times to perform such other duties as may be deemed beneficial to the Association by the President and Board of Trustees. He shall assist elected officers, Councils, committees, and Trustees in the performance of their duties. Under instructions from the President, he shall conduct a comprehensive program of public education and all such

other activities as may disclose favorably to the public at large the aims, objectives, and goals of service of the medical profession in Mississippi. He shall, when requested, place himself in position to assist any of the component societies of the Association and he shall attend meetings of the component societies when invited by officers thereof. He shall be made custodian of records, books and papers belonging to the Association and he shall keep account of and promptly place under the supervision of the Secretary-Treasurer such funds as may be delivered into his hands in the name of the Association. He shall give bond at the expense of the Association in such amount as may be required. He shall provide for the registration of the members and delegates at the annual session and cooperate in preparing for and arranging all functions of the Association, including the annual session. He shall procure an exact transcript of all proceedings of the House of Delegates. He shall maintain a register of all legal practitioners in Mississippi and he shall maintain detailed and exact records of the membership with regard to component societies, the Mississippi State Medical Association, and the American Medical Association. He shall issue evidence of membership to each physician who pays the annual assessment and is accepted in the Mississippi State Medical Association. He shall maintain close and complete liaison with the American Medical Association and shall keep the component societies informed of activities, programs, and mandates of both the state Association and the American Medical Association. He shall publish from the Central Office such memoranda, bulletins, and miscellaneous publications as may be directed by the President, the Board of Trustees, and the House of Delegates. He shall conduct the official correspondence of the Association as he may be directed. He shall employ such assistants as may be required, upon authorization of the Board of Trustees. He shall supply each component society with blank forms to be used in connection with membership and reports. He shall maintain records of monies paid by the component societies for assessments and dues. He shall prepare and publish under the direction of the President and Board of Trustees such programs as may be necessary for official functions of the Association. He shall be reimbursed for expenses incurred in the performance of his duties, separately and in addition to his regular compensation.

Chapter VIII BOARD OF TRUSTEES

Section 1. Board of Trustees. The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates. It shall consist of nine members, one from each Association District, where terms of office shall be three years and so arranged that only three members are elected annually. A Trustee shall not serve more than three consecutive terms. During vacation, the Board of Trustees shall exercise the powers conferred upon the House of Delegates by the Constitution and these By-Laws, provided that in the exercise of these powers thus conferred, the Board of Trustees shall neither consider nor act to contravene any action, mandate, or policy of the House of Delegates which may still be in effect.

Section 2. Officers of the Board. The Board of Trustees shall elect from its membership a Chairman, a Vice Chairman, and a Secretary for terms of one year during the last day of the annual session following adjournment of the House of Delegates. These officers of the Board shall compose its Executive Committee. The duties of the Secretary may be delegated to the Executive Secretary who shall maintain such special records and transcripts of meetings as the Board may desire.

Section 3. Meetings of the Board. The Board of

Trustees shall meet daily during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of any three members of the Board.

Section 4. Executive Committee. The Executive Committee of the Board of Trustees shall be empowered to act in behalf of the Board on all matters delegated to it by majority vote of the Board. The acts of the Executive Committee, however, shall be subject to confirmation by the Board.

Section 5. Reports of the Board of Trustees. The Board of Trustees shall make an annual report to the House of Delegates and such supplemental reports as necessity may require at a time designated in the regular transaction of the business of the House. The report shall be made by the Chairman, the Vice Chairman, the Secretary, or the Executive Secretary. The reports of the Board shall be made a portion of the annual transactions and proceedings of the Association.

Section 6. Duties of Trustees. Each Trustee shall be organizer and arbiter for his Association District. He shall visit the component medical societies within his District during each year and shall make an annual report of his activities and of the condition of the medical profession of each county of his District. Each Trustee shall be reimbursed for expenses incurred by him in traveling within his District or attending special meetings in the performance of his official duties, which will be allowed upon presentation of an itemized and documented account. This provision shall not be construed to include his expenses in attending the annual session of the Association.

Section 7. Public Policy. The Board of Trustees shall have the right to communicate the views of the medical profession and of the Association in the State of Mississippi with regard to matters of medical science, health, sanitation, and allied spheres of activity. It shall approve all memorials and resolutions issued but shall not issue memorials and resolutions heretofore prohibited in these By-Laws.

Section 8. Association Districts. The State of Mississippi shall be subdivided into Association Districts by counties, provided that all counties in a component society shall be in one Association District. These districts are defined as follows:

- District 1: Bolivar, Coahoma, Humphreys, Leflore, Quitman, Sunflower, Tallahatchie, Tunica, and Washington.
- District 2: Benton, DeSoto, Lafayette, Marshall, Panola, Tate, Tippah, Union, and Yalobusha.
- District 3: Alcorn, Calhoun, Chickasaw, Clay, Itawamba, Lee, Lowndes, Monroe, Noxubee, Oktibbeha, Pontotoc, Prentiss, and Tishomingo.
- District 4: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, and Webster.
- District 5: Hinds, Issaquena, Leake, Madison, Rankin, Scott, Sharkey, Simpson, Smith, Warren, and Yazoo.
- District 6: Clark, Kemper, Lauderdale, Neshoba, Newton, and Winston.
- District 7: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Pearl River, Perry, and Wayne.
- District 8: Adams, Amite, Claiborne, Copiah, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, and Wilkinson.
- District 9: Hancock, Harrison, Jackson, and Stone.

Chapter IX COUNCILS

Section 1. Councils. Councils of the Association shall be elected standing bodies of the House of Delegates, responsible thereto. There shall be a Council on Medical Service, a Council on Scientific Assembly, a Judicial Council, a Council on Constitution and By-Laws, a

Council on Legislation, a Council on Budget and Finance, an Editorial Council, and a Council on Medical Education. A Council member shall not serve more than three consecutive terms.

Section 2. Council on Medical Service. The Council on Medical Service shall be charged with the responsibilities of ascertaining and studying all aspects of medical care in Mississippi. It shall examine and make available all facts, data, and opinion on timely and adequate medical care. It shall investigate social and economic aspects of medical care and report its evaluations and findings. It shall suggest means of distribution of adequate quality medical service to the public consistent with the policies of the Association. It shall act as a factfinding and advisory body of the Association. Under its jurisdictions, there shall be assigned the activities of the Association in medical service, emergency service programs, indigent care, and allied medical agencies. There shall be one member from each Association District elected for a term of three years and so arranged that only three members shall be elected for full terms each year. The Council on Medical Service shall appoint Committees on Occupational Health, Maternal and Child Care, and Mental Health. Each committee shall consist of not less than five nor more than seven members appointed for periods of not less than one nor more than three years.

Section 3. Council on Scientific Assembly. The Council on Scientific Assembly shall be composed of the Secretary-Treasurer and the chairman and secretaries of the several scientific sections. The Secretary-Treasurer shall be chairman of the Council. Upon this Council shall devolve the duties and responsibilities of planning the annual session to include all scientific activity and the programming and scheduling of annual session events. The Council shall be empowered to appoint such committees for terms not to exceed one year as may be necessary to assist in the discharge of these duties.

Section 4. Judicial Council. The Judicial Council shall consist of nine members elected for terms of three years each, one from each Association District. The judicial powers of the Association shall be vested in this Council whose decision shall be final. The Council shall have jurisdiction in all questions involving membership in the Association, all controversies arising under the Constitution and these By-Laws, interpretation and application of the Principles of Medical Ethics of the American Medical Association, controversies between two or more component societies of the Association and among members of the Association. The Council shall have appellate jurisdiction in questions and controversies referred to the state Association by appropriate and authorized bodies of component medical societies. Appeals shall be perfected within six months following the date of decision by the constituted authority of the component society. The Council, under these several authorities, may conduct such hearings as may be necessary and after due and legal processes may, by majority opinion, censure, suspend, or expel any member for infraction of the Constitution or these By-Laws.

Section 5. Council on Constitution and By-Laws. The Council on Constitution and By-Laws shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be referred all suggested amendments and changes in the Constitution and By-Laws of the Association for recommendation to the Board of Trustees and House of Delegates.

Section 6. Council on Legislation. The Council on Legislation shall consist of nine members, one from each association district, elected by the House of Delegates for terms of three years each which are so arranged that three members are elected annually. This Council shall analyze proposed legislation, recommending to the Board of Trustees courses of action for securing laws in the interests of public health, scientific medicine, as well as medical practice. It shall study and report the need for

new and remedial legislation designed to serve the best interests of the state and nation. This Council shall be responsible to the Board of Trustees.

Section 7. Council on Budget and Finance. The Council on Budget and Finance shall consist of three members elected by the House of Delegates for terms of three years each. This Council shall receive reports of the finances of the Association and to it shall be referred all matters pertaining to the annual budget. The Council shall report annually to the House of Delegates, making specific recommendations on the annual budget of the Association. This Council shall be responsible to the Board of Trustees.

Section 8. Editorial Council. The Editorial Council shall consist of the Editor and the Associate Editors, elected by the House of Delegates to serve two years, and the former shall serve as chairman. To this Council shall be referred all reports of scientific subjects and all scientific papers and discussions presented before the Association and its component societies. The Council shall consider for publication in the official organ of the Association such papers, reports, and other data as may serve to further and advance scientific medicine in Mississippi. It shall exercise editorial authority over the official organ of the Association. This Council shall be responsible to the Board of Trustees.

Section 9. Council on Medical Education. The Council on Medical Education shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be assigned the responsibilities of encouraging undergraduate and postgraduate study of medicine, licensure, and facilities for medical education in the state. This Council shall be responsible to the Board of Trustees.

Chapter X COMMITTEES OF THE BOARD OF TRUSTEES

Section 1. Committees of the Board of Trustees. Standing committees of the Board of Trustees shall consist of the Advisory Committee to the Medical Auxiliary, Grievance Committee, the Committee on Publications, and the Committee on Medicine and Religion. All committees of the Board of Trustees shall be appointed by the Board for terms specified unless their selection is otherwise prescribed.

Section 2. Advisory Committee to the Medical Auxiliary. The Advisory Committee to the Medical Auxiliary shall consist of three members appointed for terms of three years each. The committee shall be charged with the responsibility of advising the Woman's Auxiliary to the Mississippi State Medical Association on matters of organization and program activity relating to the supportive role of the Auxiliary in its work with the Association.

Section 3. Grievance Committee. The Grievance Committee shall be appointed by the President with the advice and consent of the Board of Trustees. Its purpose shall be to prevent or resolve misunderstandings, to clarify and adjust differences between physician and patient, and to assist in maintaining the high levels of professional deportment already established by the *Principles of Medical Ethics*. The committee shall consist of nine members, one from each Association District, appointed for terms of three years each so as to provide for appointment of three members annually. Members of this committee shall not simultaneously serve on any disciplinary or appeal body of the Association or its component societies. The committee shall have authority to compel a response either in writing or by personal appearance from any member of the Association, authority to initiate investigations on its own motion, and authority to file charges in the name of the committee before the Judicial Council of the Association. Under no circumstances shall the Grievance Committee ever ex-

BY-LAWS / Continued

ercise a disciplinary function and its power and authority shall be limited to the receiving of complaints, conduct of investigations, hearings, mediation, arbitration, and where necessary, referral of matters to appropriate bodies for adjudication or discipline. The committee shall prescribe its rules for operation which shall not be in conflict with generally accepted guides promulgated by the American Medical Association.

Section 4. Committee on Publications. The Committee on Publications shall consist of six members. These shall consist of the Editor, the two Associate Editors, and three others, the three latter being appointed by the Board of Trustees for terms of three years which are so arranged to provide for appointment of one such member annually. The chairman of the committee shall be designated by the Board. The committee shall implement instructions and policies of the Board of Trustees relating to the official Journal of the Association. Additionally, the committee shall study and recommend to the Board policy proposals relating to organization and production of the Journal, reporting annually its deliberations.

Section 5. Committee on Medicine and Religion. The Committee on Medicine and Religion shall consist of six members appointed for terms of three years each and so arranged to provide for appointment of two members annually. The committee shall be responsible for formulating a program in the field of medicine and religion and for carrying out such assignments as may be made in this connection by the Board of Trustees.

Chapter XI

RULES AND CONDUCT

The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XII

COMPONENT SOCIETIES

Section 1. Component Societies. All component societies now in affiliation with this Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Board of Trustees and approval by the House of Delegates, receive a charter from and become a component part of this Association. The Board of Trustees and House of Delegates, on recommendation by the Judicial Council, shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and By-Laws.

Section 2. Number of Societies. Only one component medical society shall be chartered in any county but nothing in this section shall be construed as to prohibit unofficial organization of medical clubs or other county level groups of physicians whose purpose it is to further and advance scientific medicine and postgraduate medical education.

Section 3. Members of Societies. Each component society shall judge the qualifications of its own members, but as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is qualified under Chapter I, Section 1, of these By-Laws shall be eligible for election to membership. Before a charter is issued to any component society, full and ample opportunity shall be given to every

such physician in the county to become a member.

Section 4. Right of Appeal. Any physician who may feel aggrieved by the action of the society of his county or District in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Judicial Council, which, upon a majority vote, may permit him to petition for membership in an adjacent society.

Section 5. Evidence of Appeals. In hearing appeals, the Judicial Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, efforts at a conciliation and compromise shall precede all such hearings.

Section 6. Area Jurisdiction. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 7. Professional Authority. Each component society shall have general direction of the affairs of the profession in its jurisdiction and shall constantly use its influence to the moral and professional betterment of its physicians, to the end that the membership shall embrace every qualified physician in its jurisdiction.

Section 8. Meetings. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall especially be encouraged to do postgraduate work, and to give the society first benefit of such labors. Official positions and other preferments shall be unstintingly given to such members.

Section 9. Delegates. Each county shall be entitled to representation in the House of Delegates of this Association, one delegate for each fifty members or fraction thereof. Delegates shall be elected for terms of not less than two years and societies shall report such elections to the Executive Secretary of the Association in no event later than thirty days before the annual session.

Section 10. Duties of Component Society Secretaries. The secretary of each component medical society shall perform such duties as are usual and customary to his office. He shall maintain the official roll of membership for his society, shall collect dues and assessments, and shall make official reports as elsewhere prescribed in these By-Laws to the Association, transmitting dues in behalf of component society members. He shall conduct the official correspondence of his component medical society.

Chapter XIII

FISCAL YEAR

The fiscal year of the Association and its component county societies shall begin January 1 each year and end on December 31 following, but membership in the state Association shall not lapse until April 1 of that year.

Chapter XIV

AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the delegates present at that session, after the amendment has laid upon the table for one day.

Chapter XV

REPEALING AUTHORITY

Upon adoption of these By-Laws, all previous By-Laws, motions of record, mandates, policies, rules and regulations in conflict therewith are hereby repealed, except that officers elected to serve in the Association and its component societies shall continue their incumbency until the completion of their previously prescribed terms and their successors elected under the current By-Laws.



The Mixed Blessings of the Federal Research Dollar

I

BECAUSE IN THE PUBLIC MIND, research tends to become enshrouded in such an aura of divinity as to exclude critical discussion and analysis of all that is advanced in its name, the American Medical Association has an obligation to the public and to the medical profession to question any facet of the federal biomedical research program which it may believe to be ill advised or which it believes to be in need of constructive counsel.

This amazingly candid injunction isn't an utterance by some hard-nosed adversary of the federal dollar in the laboratory; it is the considered pronouncement of the AMA's own Commission on Research which has concluded its two and a half year study. And more than that, it was not a handpicked, stacked body but rather a balanced group of highly competent individuals chaired by former U. S. Supreme Court Justice Charles E. Whittaker of Kansas City. The commission has presented its report to the AMA Board of Trustees, and the findings will soon be a subject for consideration by all of American medicine.

Said Mr. Justice Whittaker of the commission's report: "While the findings of this commission regarding federal impact on medical research are on the whole favorable, the commission has observed stresses and strains within the growth and development of federally-sponsored research which call for remedial action."

As the full report becomes available to the scientific medical community and the general public, it may be that its most valuable finding will not even appear in the voluminous text. This could well be the stimulation for concern over the mixed blessing of federally-supported research and the eventual reorganization of such public sponsorship of vital investigation toward the end of eliminating many, if not most, of the undesirable aspects inherent in the system emerging during its often hasty evolution.

So it is not the purpose of this editorial examination of the commission's report to criticize but rather to assess in the interest of medical science. After all, the federal government and the research institutions aren't the enemy; the enemy is disease.

II

The AMA Commission on Research was called into being by the Board of Trustees in late 1964. Concerned with the development and direction of all research support, as well as association policy, the Board named a blue ribbon body to conduct a searching inquiry along stated lines. The commission's membership, in addition to Mr. Justice Whittaker, included distinguished deans of medical schools, research leaders, experts in finance, and executives of the pharmaceutical manufacturing industry.

The charge to the commission encompassed five areas of interest with reference to the concerns ex-

pressed by the Board of Trustees. The group was asked to examine the impact of federal research grants on medical education, institutions involved, and the nation's scientific and technical resources. The question of the expanding federal research role on the broad areas of medical service outside of medical education was raised, as was the effect of federal spending on private philanthropy and the ability of the latter to make meaningful contributions.

The commission was further asked to examine the scope of federal medical research support and the mechanisms used and to arrive at such additional conclusions and recommendations which it deemed advisable for inclusion in its report.

In the course of its inquiries and studies, the commission had the benefit of many consultants, witnesses, and a wealth of source data. A competent professional staff assisted actively. As the chairman stated, the findings as a whole are favorable, but the commission showed clearly that it is nobody's patsy, and it called a spade a spade and an ill in research by the proper name.

III

The American Medical Association has never unequivocally endorsed federal research grants. On many occasions, it has called for federal support of given research projects or areas of inquiry. Interestingly enough, AMA has also never opposed any federal appropriation for the support of medical research alone.

On the plus side, the commission noted the mushrooming expansion of the nation's scientific and technical resources since World War II, especially in the biomedical sphere of interest. Concurring in the belief that the current level of adequacy and excellence in American biomedical research resources has never before been equaled, the commission was frank to say that abundant federal funds have also gone to support mediocrity as well as the best in scientific talent.

That federal support of biomedical research has become a permanent element of national policy is conceded, and it is obvious that this policy was developed in response to popular demand for the conquest of disease as a matter of highest national priority.

The impact of federally supported research on medical schools was found to be favorable in many respects, adverse in some, and complex in most. On the whole, the work of these major centers has been enriched by this support, and with-

out it, many institutions would have been in danger of collapse. Imbalances in the interrelated areas of teaching, research, and patient care have inevitably developed in the grant dollar climate, and there is no debating that glamorized research activity and opportunity have contributed to a flight from teaching by some investigators.

Wisely, the commission concluded that the principal imbalance arising out of the burgeoning financial support of research is that all of this happens in the midst of a relative scarcity of funds for educational programs. It sometimes is a fact that the cobbler's children have no shoes.

IV

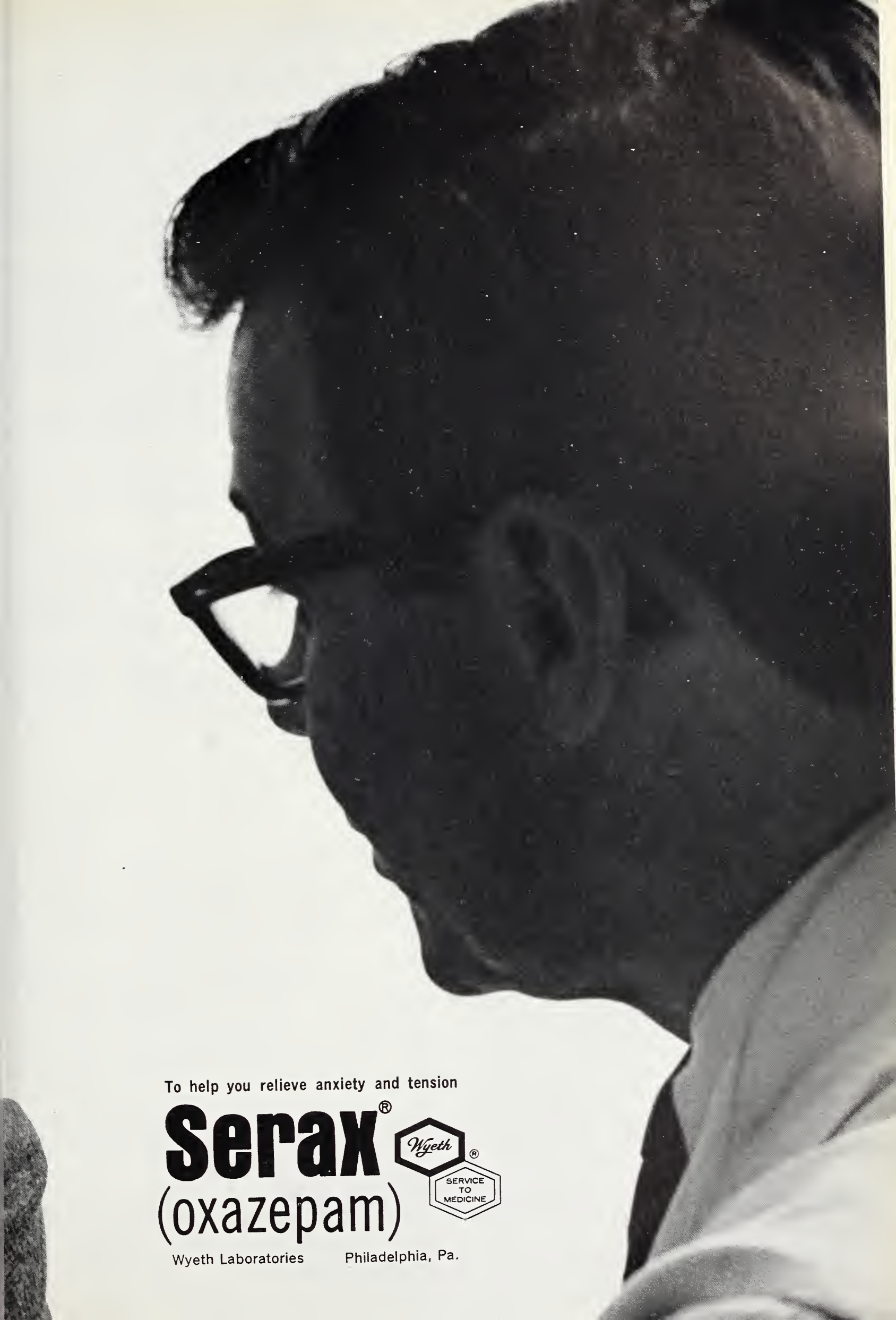
It was discovered that the federal dollar brings other mixed blessings. Emphasis on project grants, those intended for specific research undertakings, have enriched the capabilities of the more affluent schools, already abundantly endowed with distinguished investigators and ample funding, while leaving the other schools relatively poorer. The remedy: Place greater emphasis on institutional grants where the money can be administered at the discretion of the schools.

In this connection, the commission commended the National Institutes of Health for steering clear of influencing research institutions which receive NIH dollars as to academic decisions. Despite this, the commission found, the principle inherent in the federal grant dollar tends in the long run to lead to federal control. There is no denying that the grantor can and does influence the purpose to which his money is put.

In considering the effect of federally-funded medical research on medical service outside of medical education, the commission noted many benefits. Improved quality of patient care reflects



"That's a nasty cough you have, Mr. Smith."



To help you relieve anxiety and tension

Serax[®]
(oxazepam)



Wyeth Laboratories

Philadelphia, Pa.

the benefit of research. Prevailing patterns of disease have been profoundly altered by research progress and its contribution to the fund of usable scientific medical knowledge. Advances in immunization and antimicrobial therapy, along with public health innovations, have reduced many communicable diseases to controllable levels.

Longevity has increased, neonatal mortality can be expected to continue to decline, and other indices and indicators point up further beneficial results.

Notwithstanding the sharp reduction in the ratio of private giving to federal granting, the gifts of private foundations and industry have increased substantially over the years. The commission believes that there is a vital role to be played in medical research by the private sector. For example, voluntary health organizations almost invariably duplicate federal granting patterns, and these organizations generate huge sums for research purposes. The voluntary health agencies seem to show a hesitancy for risk-taking and assumption of new initiatives.

Perhaps one of the most significant findings is the commission's recommendation that biomedical research is best served by pluralistic support. This sharing by the public and private sectors would bring about a diversity of judgments entering into the allocation of research funds with the added benefit of the receiving institutions retaining their independent identities and their freedom of judgment.

V

Finally, there are legal and socioeconomic aspects which must be considered in this burning question of who gives to whom and for what purpose under which conditions. The commission takes a strong position for protecting the patent rights of private industry, because a pharmaceutical manufacturer who pours millions into research must enjoy the fruits of his labors or simply go broke.

So the AMA should support in general federal biomedical research programs, but it ought also to be the public and scientific watchdog, ready and willing to speak out when necessary on any ill advised trend or on any program in need of constructive counsel. The AMA should also urge, the commission continues, the Congress to identify the purpose of grants so precisely that the nation may know with reasonable certainty what is being supported and have a basis for future decision making. There must never be a monolithic, elite,

single-level decision-making establishment at federal level.

To help correct the imbalance between private and public giving, more liberal tax laws should be enacted as incentives to donors of private funds. Federal grants for operational aspects of research should be made on a matching basis with state funds with the deciding left to the state or the institution.

The dilemma is deep and often perplexing. There is no debate about the need for the astronomical sums of money which only the federal government can give to biomedical research. There is endless debate about the way it gives it. As the commission has suggested, there are mixed blessings in the system, but there are also rational remedies available. Soundly conceived, necessary research can and must be continued, even accelerated. The delineation of the question, the candid findings of the AMA commission, and the rational solutions offered all coalesce as a new opportunity for American medicine.—R.B.K.

The Optometrists and Title XVIII

Prominent among those testifying on H.R. 5710, the Social Security Amendments of 1967, was the American Optometric Association. The hearings included major testimony on Title XVIII of Public Law 89-97, Medicare for those over 65,



Copyright 1967, Mississippi State Medical Association

"I hardly think it's necessary for us to synchronize our watches."

Candidates for Mediatic

Commonly heard complaints from your geriatric patients may indicate an underlying disorder that may require immediate attention—and definitive therapy. With or without an underlying functional illness, patients' physical and emotional well-being may be enhanced by adjunctive steroid-nutritional therapy. That's why so many patients just like these are ideal candidates for MEDIATRIC from their very first visit.

A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging.... This therapy resulted in improvement of 75 per cent of the patients...."

Neill, A. J.: Clin. Med. 8:518 (Mar.) 1961.

CONTRAINDICATION: Carcinoma of the prostate state, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic blood examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal

bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: Male and female: 1 Tablet or Capsule, or 3 teaspoonfuls Liquid, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

The estrogen content is PREMARIN® (conjugated estrogens—equine), the orally active, natural estrogen most widely prescribed for its superior physiologic and metabolic benefits. The combination of estrogen and *methyltestosterone* can help maintain an anabolic balance to forestall premature deteriorative changes of aging.

MEDIATRIC also supplies a small amount of *methamphetamine* to provide a gentle mood uplift; and nutritional supplements specially selected to meet the needs of the aging.

MEDIATRIC helps keep the older patients alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, and lack of interest so often associated with declining gonadal hormone secretion.

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 752 — MEDIATRIC Tablets, in bottles of 100 and 1,000.

No. 252 — MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.

No. 910 — MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon.

Steroid-nutritional compound

Conjugated estrogens—equine (PREMARIN®)
Methyltestosterone
Methamphetamine HCl
Cyanocobalamin
Intrinsic factor concentrate
Thiamine HCl
Thiamine mononitrate
Riboflavin
Niacinamide
Pyridoxine HCl
Calcium pantothenate
Ferrous sulfate exsiccated
Ascorbic acid

Each
MEDIATRIC
TABLET or
CAPSULE
contains:

0.25 mg.
2.5 mg.
1.0 mg.
2.5 mcg.
8.0 mg.
—
10.0 mg.
5.0 mg.
50.0 mg.
3.0 mg.
20.0 mg.
30.0 mg.
100.0 mg.

Each 15 cc.
(3 teaspoonfuls)
of MEDIATRIC
LIQUID
contains:

0.25 mg.
2.5 mg.
1.0 mg.
1.5 mcg.
—
5.0 mg.
—
—
—
—
—
—
—

(Contains
15% alcohol)

Mediatric®

tablets • capsules • liquid

AYERST LABORATORIES • New York, N. Y. 10017 • Montreal, Canada



and the optometrists were very much in the legislative ball game.

An optometrist identified as W. Judd Chapman, who is chairman of the AOA Committee on Legislation, told the House Committee on Ways and Means that he was there "to attempt to iron out an important but otherwise small wrinkle in the Medicare legislation." He observed that "optometric services are made available under Title XVIII but, despite the good intentions of PL 89-97, beneficiaries of Title XVIII cannot obtain from optometrists services to which they are entitled and even if they could, beneficiaries would first be required to go to a medical . . . doctor to certify that a doctor of optometry's (sic) services are necessary."

The witness said that when an optometrist submits a Medicare claim to the Part 1-B carrier, it is invariably returned with a standard reply that Medicare doesn't pay optometrists. All of which is quite true.

Title XVIII specifically excludes eye examinations by anybody for the purpose of prescribing glasses, and eyeglasses may not be provided as a Medicare benefit. To get to the core of the matter, Part 1-B is a *medical* program, and it is specifically defined in the law as such. More than that, it specifically provides for the services of a physician.

Were the Congress to amend the Medicare law to include optometric services, the floodgates would be opened to just about every ancillary service and even to cultists. Next would obviously be the chiropractors, and they have testified, too.

Wisely, the Congress has seen fit to limit Medicare to medical services for patient care. With cost factors entering the picture and with a growing awareness of the utter necessity for medical guidance of the program and total medical management of the patient, it would be the height of folly for the law to be weakened by opening it up to any and everyone. So let's have no "opticare" now or ever.—R.B.K.

Shifting Shares in the Health Care Dollar

More Americans are spending more dollars for health care, but the amount of their disposable income which goes for these essential services has

risen less in the 1955-65 decade than the amounts which they must lay on the line for other needed goods and services. There is still little question that everybody is getting his money's worth in health care, and the outlook is even better.

Comprehensive studies released by the U. S. Department of Commerce show that there has been a major shift in the allocation of the health care dollar with rising hospital costs. In the decade studied, the hospital share moved steadily upward from 24.6 cents to a round 30 cents. The physician service share moved only slightly in 10 years from 27.1 cents to 27.7 cents. In the latter half of the study, 1960 to 1965, the physician service share remained static at 27.7 cents, while the hospital share advanced from 26.6 cents to the 1965 level of 30 cents.

Drugs have declined in the health dollar picture, going from 18.5 cents in 1955 to 16.4 cents in 1965. Also declining is the dentist's share which has dropped from 12 cents in 1955 to 9.6 cents in 1965.

The remainder of the health care dollar, as analyzed by the Department of Commerce studies, is divided into expenditures for appliances, health insurance, and other services. This, too, has declined, falling from a 1955 level of 17.8 cents to a 1965 total of 16.3 cents. Most notable has been the decrease in outlays for health insurance. This does not, however, mean that less money is being put into this protection, because the total number of Americans covered has steadily risen. It simply means that this share of the health care dollar is shrinking.

The dilemma in the cost-of-care equation is the hospital, and its economic problems are many and massive. Recently enacted minimum wage laws, mounting costs of construction, supplies, and services, and increasing consumer demands for additional care capabilities and patient conveniences are some of the factors in the seemingly endless upward spiral of hospital costs. With a mean national cost of about \$60 per patient day, the hospital's share continues to zoom, with some authorities forecasting \$100 per patient day by 1975. It is a problem of staggering dimensions to which all of medicine will continue to address itself. In the meanwhile, the consumer appears to be holding his own, and he is getting full measure for his health care dollar.—R.B.K.



POSTGRADUATE CALENDAR

THE THYROID AND RELATED PROBLEMS

University Medical Center, Jackson
September 12, 1967, beginning at 9 a.m.

Morning

THE THYROID GLAND

ANATOMY, Carroll R. Ball, Ph.D.
PHYSIOLOGY, Arthur C. Guyton, M.D.
PATHOLOGY, William B. Wilson, M.D.

THE DIAGNOSIS AND MANAGEMENT OF THYROIDITIS

Joseph L. Glasgow, M.D.

THYROID PROBLEMS DURING PREGNANCY

Lois M. Mosey, M.D.

GYNECOLOGIC ABNORMALITIES OF THYROID ORIGIN

Henry A. Thiede, M.D.

Discussion Period

Recess for Lunch

Afternoon

MEDICAL ASPECTS OF HYPERTHYROIDISM

Herbert G. Langford, M.D.

SURGICAL ASPECTS OF HYPERTHYROIDISM

J. Harvey Johnston, Jr., M.D.

HYPOTHYROIDISM—DIAGNOSIS AND TREATMENT

J. Manning Hudson, M.D.

RADIOLOGIC CONSIDERATIONS IN THE DIAGNOSIS AND MANAGEMENT OF THYROID TUMORS

William M. Flowers, M.D.

SURGICAL ASPECTS OF THYROID TUMORS

W. Couperly Shands, M.D.

HYPERPARATHYROIDISM

MEDICAL ASPECTS, Herbert G. Langford,
M.D.

SURGICAL ASPECTS, Edward M. Lowicki,
M.D.

FUTURE CALENDAR

September 22

CURRENT PRACTICES IN THE MANAGEMENT OF BILIARY TRACT PROBLEMS

Guest speaker for this symposium will be
Dr. Frank Glenn, Professor of Surgery at
Cornell University, who is one of the most

knowledgeable teachers in American surgery
concerning biliary tract problems.

October 12-14

ARTHRITIS SEMINAR

A three-day program is to be presented
under the auspices of the Mississippi Chap-
ter, Arthritis and Rheumatism Foundation
and the University of Mississippi School of
Medicine.

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRAC- TICE

October 27

SEMINAR FOR NURSE ANESTHETISTS

November 10

SYMPOSIUM ON HAND INJURIES

November 17

DIAGNOSIS AND MANAGEMENT OF THE ANE- MIC PATIENT

December 8

CARDIOPULMONARY RESUSCITATION

December 14

MODERN MANAGEMENT OF COMMON OB- STETRICAL COMPLICATIONS

January 5, 1968

OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE

January 14, 1968

ALIMENTARY TRACT PROBLEMS

February 1, 1968

UMC DAY

March 8, 1968

SEMINAR ON RENAL DISEASES

March 27-29, 1968

CARDIOVASCULAR SEMINAR

April 11, 1968

DIABETES SEMINAR

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

*The
fast-disintegrating
uncoated tablet
gives relief in
15 minutes*

Each tablet contains:

Potassium Iodide.....195 mg.
Aminophylline.....130 mg.
Phenobarbital, Caution: May be habit forming... 21 mg.
Ephedrine HCl.....16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of
water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



DEATHS

BARNES, AARON, Kosciusko. M.D., Memphis Hospital Medical College, Memphis, Tenn., 1913; died April 26, 1967.

CHANTON, EDWIN FRANKLIN, Biloxi. M.D., Louisiana State University of Medicine, New Orleans, La., 1946; interned Kings County Hospital, New York, N. Y.; member Southern Medical Association and MSMA; died May 8, 1967.

LOVE, WILLIAM DeLOSS, IV, Jackson. M.D., Washington University School of Medicine, St. Louis, Mo., 1947; fellow, American College of Surgeons, Central Society for Clinical Research and MSMA; died May 22, 1967.

WARING, MARCUS ELTON, Tylertown, M.D., Tulane University School of Medicine, New Orleans, La., 1948; fellow American Academy of General Practice and MSMA; died May 16, 1967.

FRENCH, DeWITT CLINTON, Water Valley, M.D., Memphis Methodist Hospital, Memphis, Tenn., 1911; past President of the North Mississippi Medical Society; awarded the Golden "T" by University of Tennessee in 1961; died May 13, 1967.



PERSONALS

RICHARD G. BURMAN of Gulfport will serve as fleet surgeon for the 19th Annual Mississippi Deep Sea Fishing Rodeo. The major sports event will be conducted July 1-4 with headquarters at the small craft harbor in Gulfport.

ELMER J. HARRIS, ROBERT P. HENDERSON, and JAMES M. PACKER of Jackson have announced the association of OTTIS G. BALL in the practice of radiology both in their clinic at 1151 North State St. and in the Mississippi Baptist Hospital.

J. MANNING HUDSON of Jackson has been elected vice president of the Millsaps College Alumni Association for 1967-68. A New Orleans obstetrician-gynecologist, EUGENE COUNTISS, is the new alumni association president, succeeding RAYMOND S. MARTIN, JR., of Jackson.

DONALD E. KILLELEA of Natchez has been elected president of the Adams County Association for Retarded Children. One of the principal projects of the group for the 1967-68 year is the establishment of a sheltered workshop.

HOWARD A. NELSON of Greenwood has been named Leflore County campaign chairman for William Winter, Democratic candidate for governor.

DAVID J. VAN LANDINGHAM has been named "Man of the Month" by the Jackson Chamber of Commerce for his work in strengthening the chamber's membership base. Also honored in this work was JIM G. HENDRICK of Jackson.

REGINALD P. WHITE of Meridian has been elected a Fellow of the American Psychiatric Association. He is director of the East Mississippi State Hospital. The fellowship investiture was made during the recent APA annual meeting in Detroit.



**NEW
MEMBERS**

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association:

BALL, GEORGE, Jackson. Born Tylertown, Miss., Aug. 11, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1957; interned Touro Infirmary, New Orleans, one year; ob-gyn residency, Charity Hospital, New Orleans, three year; fellow, American College of Ob-Gyn; elected May 2, 1967, by Central Medical Society.

CARR, WILLIAM JOLLY, JR., Gulfport. Born Gulfport, Miss., Oct. 10, 1934; M.D., Tulane University School of Medicine, New Orleans, La., 1963; interned Charity Hospital, New Orleans, one year; pediatrics residency, Charity Hospital, New Orleans, two years; elected March 1, 1967, by Coast Counties Medical Society.

ELLIS, MARSHALL STONE, Clarksdale. Born Holly Springs, Miss., Jan. 16, 1926; M.D., University of Tennessee College of Medicine, Memphis; interned Methodist Hospital, Memphis, one year; elected April 19, 1967, by Clarksdale and Six Counties Medical Society.

SCHMIDT, HARRY JOHNSON, JR., Biloxi. Born New Orleans, La., Oct. 5, 1936; M.D., Tulane Uni-

removes the mental blur



that clouds vision

SOLFOTON[®]

Each tablet or capsule contains
PHENOBARBITAL.....16 mg.
(Warning: may be habit forming)
BENSULFOID[®] (See P D R).....65 mg.
Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.
Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING
WITHOUT PRESCRIPTION

AVAILABLE

Solfoton (yellow, uncoated tablets "P")
100s, 500s, 5000s
Solfoton Capsules (yellow and brown)
100s, 500s, 1000s
Solfoton S/C (sugar-coated beige tablets)
100s, 500s, 4000s

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

NEW MEMBERS / Continued

versity School of Medicine, New Orleans, 1962; interned Charity Hospital, New Orleans, one year; internal medicine residency, Touro Infirmary, New Orleans, one year; internal medicine residency, Charity Hospital, New Orleans, two years; elected March 1, 1967, by Coast Counties Medical Society.

WILSON, WILLIAM BARR, Jackson. Born Greenville, Miss., May 31, 1930; M.D., Vanderbilt University, Nashville, Tenn., 1955; interned Vanderbilt University Hospital, Nashville, one year; assistant resident, Vanderbilt University Hospital, one year; internal medicine, chief resident, V.A. Service, Vanderbilt University Hospital, one year; pathology, assistant resident, Vanderbilt University Hospital, Nashville, three years; pathology, chief resident, Mid-State Baptist Hospital, Nashville, one year; elected Jan. 3, 1967, by Central Medical Society.

AAGP Receives Federal Research Grant

A federal grant for \$133,800 has been awarded to the American Academy of General Practice by the National Institute of Mental Health. The grant, to be supplied at the rate of \$44,600 a year over a 3-year period, is designed to assist the academy in establishing postgraduate psychiatric education programs for family doctors.

The grant will be administered by the Academy's Committee on Mental Health headed by Dr. James L. Grobe, Phoenix, Ariz.

The postgraduate education program was designed by the committee to further the education of family doctors in the basic techniques of psychiatry in diagnosis and therapy and to establish better communications between practicing psychiatrists and family doctors, according to Dr. Carroll L. Witten, president of the 30,000-member family doctor organization.

"There is urgent need that the nation's family doctors be well equipped to recognize and treat emotional as well as physical problems," Dr. Witten stated. He cited the fact that approximately 80 to 90 per cent of patients with emotional problems are seen first by a non-psychiatrist. "The family doctor, usually the first professional involved in cases of emotional disturbance, is uniquely situated to treat non-serious cases and to recognize the patient who needs specialty attention," he said.

The new academy program also calls for continuation of a series of regional mental health workshops, attended by family doctors and psychiatrists from a several-state area. The workshops were established to teach psychiatric procedures and to stimulate participating physicians to establish postgraduate education programs in psychiatry in their home states. The workshop program is sponsored jointly by the Academy and the American Psychiatric Association. It was established four years ago under a similar NIMH grant.

The academy's philosophy of continuing education has been integrated into "The Core Content of Family Medicine," a blue-print prepared by the organization to describe the practice of the proposed new specialist in family medicine. The Academy is spearheading the drive to establish a certifying board in family practice, which will make it the 20th primary medical specialty. A preliminary application for establishment of a certifying board has been approved by the Liaison Committee of the Advisory Board for Medical Specialties.

Under the "Core Content" blue-print, the resident physician studying for the new specialty of family medicine would be required to take a heavy concentration of courses in the behavioral sciences, including psychiatry, psychology, sociology, economics, ethics and comparative religion. He would have extensive work covering such areas as the doctor-patient relationship, family counseling, child psychiatry, sex education, clinical psychology, psychosomatic medicine, the geriatric and the influence of environment on mental problems.

Memphis Hospital Gets Heliport License

The Methodist Hospital at Memphis has received approval from the Federal Aviation Agency for a rooftop heliport. Spokesmen said that the institution is preparing for the future when many accident cases may be expected to be flown to hospitals.

Twenty-five Memphis physicians are known to hold private pilot's licenses, and a neurological surgeon there, Dr. Joseph Miller, said that he plans to qualify as a helicopter pilot in anticipation of helping in the air ambulance project.

Initial releases stated that the Memphis institution was the first civilian hospital in the nation to secure an FAA license for a heliport, but the Ochsner Foundation Hospital at New Orleans has had such a facility for 10 years.



Book Reviews

Obstetrics and Gynecology. By J. Robert Willson, M.D.; Clayton T. Beecham, M.D.; and Elsie R. Carrington, M.D. 776 pages with illustrations. St. Louis: The C. V. Mosby Co., 1966. \$15.50.

The third edition of *Obstetrics and Gynecology* by Willson, Beecham, and Carrington would be an aid to any physician who treats the female patient. One volume alone could not tell the whole story of obstetrics and gynecology, but the references at the end of each chapter allow the reader to study in detail the subjects discussed. Throughout the book are good illustrations, all of which are well placed in reference to material being read.

The authors have furnished a background of information concerning emotional and physiologic phases of reproduction. The emphasis has not been placed on the mechanics of obstetrics and gynecology, but rather on the physiologic functions. In the section on Diagnostic Methods in *Obstetrics and Gynecology* we find the well explained basic and fundamental examinations. In addition, laboratory diagnostic procedures are well presented and make one realize he could be doing more of these simple but valuable procedures daily in his office.

The section on Pediatric Gynecology is well presented. This is a part of every General Practitioner's practice but has been so often neglected. The authors make you more cognizant of diagnosis and treatment in this age group. One chapter discusses Psychology and Life Periods of Women. Even though this section contains only ten pages, the importance of this field in treating the female patient is pointed out. Throughout the book up-to-date usages of the newer therapeutic agents are given. Although it would have been impossible to cover all the drugs, the book has adhered to the basic and well tried drugs.

The section on Normal and Abnormal Pregnancy presents sound and basic medicine. While the mechanics of labor was not emphasized none of the basic fundamentals were left out. One chapter presents the uses of sex hormones and related substances in gynecology. This is an excellent dis-

cussion of these often misused drugs. Merits of the more useful drugs are discussed along with limitations of the drugs.

Many times upon opening a book and seeing that it contains 727 pages with 51 chapters, one is reluctant to start reading, but this is not the case with this book due to the interesting and easily read manner in which the authors have presented the material.

JAMES M. DABBS, M.D.

Neuro-ophthalmology, Volume III; Symposium of the University of Miami and the Bascom Palmer Eye Institute. Compiled and edited by J. Lawton Smith, M.D., 349 pages with illustrations. St. Louis: The C. V. Mosby Co., 1967. \$25.00.

This volume represents material presented at the third postgraduate symposium on clinical neuro-ophthalmology sponsored by the Department of Ophthalmology, University of Miami School of Medicine, January 1966. It was compiled and edited by the dynamic J. Lawton Smith, M.D., an ophthalmologist who also holds teaching appointments in neuro-surgery and neurology. Emphasis is placed on pediatric neuro-ophthalmology and in addition to the editor's chapter, eighteen others are presented by eminent clinicians representing the fields of internal medicine, radiology, neuro-surgery, neurology, pediatrics, ophthalmology, and neuro-pathology and legal medicine.

As the author points out, while this volume is not designed to serve as a text in the broad field of neuro-ophthalmology, nevertheless, its comprehensive approach has something to offer several disciplines. Chapter nine, Neurologic Blindness in Infancy, and chapter six, Pituitary Ablation for the Treatment of Diabetic Retinopathy are but two subjects covered that will serve to whet the scholastic appetite and suggest that the volume would be a worthwhile addition to one's library.

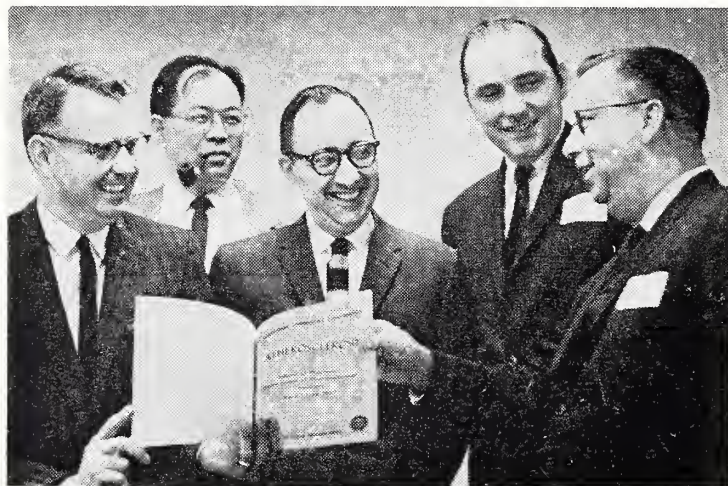
Appendix I by the author entitled, an Introduction to Ocular Motility and Strabismus, and Appendix II, Eye Signs in the Physically or Mentally Retarded Child contain valuable material serving to compliment what is already a valuable publication.

LYNN D. ABERNETHY, M.D.

Ole Miss Sponsors Atherosclerosis Meet

Nationally known authorities appeared before the recent Medicinal Chemistry Conference on Atherosclerosis conducted on the Oxford campus of the University of Mississippi. Sponsors of the event were members of the Department of Pharmaceutical Chemistry.

Heading the slate of speakers were Drs. Charles W. Hartman, dean of the Ole Miss School of



Key participants in the Ole Miss Medicinal Chemistry Conference on Atherosclerosis are, from the left, Drs. H. B. White, T. T. Tchen, David Kritchevsky, W. R. Nes, and Charles W. Hartman.

Pharmacy; H. B. White of the University Medical Center; T. T. Tchen of Wayne State University; David Kritchevsky of the Wistar Institute at Philadelphia; and W. R. Nes, professor of chemistry at Ole Miss.

AAOS Sets Conclave on Sports Medicine

National authorities in the field of sports medicine will be lecturers at a special postgraduate course of the American Academy of Orthopaedic Surgeons, August 14-16, Oklahoma City, Oklahoma.

Invited to attend the three-day course of lectures and audio-visual demonstrations are orthopaedic surgeons, general physicians, high school and college team physicians, and others with a medical interest in the care of the athlete. It is to be sponsored by the academy's Committee on Sports Medicine in cooperation with the United States Olympic Medical and Training Services Committee and the Department of Orthopaedic

and Fracture Surgery, University of Oklahoma School of Medicine at Oklahoma City.

Chairman of the course is Dr. Don H. O'Donoghue, chairman of the Orthopaedic and Fracture Surgery Department at the medical school. The faculty is composed of lecturers from 14 states and Canada as well as members of the university staff.

Lecturers will discuss in depth topics including altitude and other medical problems related to the 1968 Summer Olympic Games in Mexico City, the adolescent athlete, competitive swimming, the anthropology and physiology of endurance runners, mechanics of running, the use and misuse of drugs in athletics, and effects of vigorous athletic activity on women.

A symposium on the arm in such throwing sports as baseball, javelin, shot put, and discus will feature talks on shoulder joint and muscle injuries, elbow injuries and the aging pitcher. A special day-long forum will be devoted to diagnosis and treatment of knee injuries.

MIC Says Program Is Moving Forward

Recent actions in the Delta and in Meridian have been hailed by the Mississippi Interagency Commission—a liaison of five state departments (health, education, welfare, colleges and mental institutions) engaged in mental care.

MIC program director Dr. Dorothy Moore said the commission is "indeed happy to note the endorsements of our program by the Delta Council, at its recent annual meeting, and by the board of directors of the Meridian Chamber of Commerce."

The program is designed to help the mentally ill, the mentally retarded, those with severe emotional disturbances, the alcoholic, delinquent and any others seeking mental care, as well as members of their families needing guidance.

"The program," said Dr. Moore, "is designed to bring closer to the people, in their home communities, a wide range of mental-care services which have not previously been available."

She said 21 county boards of supervisors have appointed representatives to five commissions to plan and establish multi-county programs in their respective areas, and similar interest is being shown in many other sections of the state.

The commission assists regional commissions in setting up programs tailored to area needs and works with local groups interested in establishing such a commission. Such meetings have been held

in almost every section of the state in recent months.

Under new state laws passed in 1966, counties may levy up to two mills tax and otherwise pool their efforts on behalf of regional mental-care programs, similar to the way counties now support junior colleges on an area basis.

"No state matching funds were allocated by the 1966 legislature," said Dr. Moore, "but federal matching funds are available, and counties or regions can, of course, establish their own programs with 100 per cent local support."

The MIC, established July 1, 1966, is now rounding out its first year as the state's mental-care planning and programming agency. Its five members are the chief executive officers of the five state departments involved in mental care and include:

C. Seth Hudspeth, Board of Trustees of Mental Institutions, chairman; Dr. A. L. Gray, State Board of Health, vice chairman; Miss Frances Gandy, Department of Public Welfare; Dr. E. R. Jobe, Board of Trustees of Institutions of Higher Learning; and J. M. Tubb, State Department of Education.

The commission has designed 14 multi-county regions for programming purposes, and Dr. Moore listed the following members of five regional

commissions already established or taking shape under the 1966 laws, together with the county each represents:

Region Two: Dr. Guy Farmer (Calhoun), R. E. Darby (DeSoto), Robert Winkler (Lafayette), John Kloha (Marshall), Nick Aldridge (Panola) and Benny C. Taylor (Yalobusha). Winkler is chairman. No representative has been named for Tate county as yet.

Region Three: George M. Davis (Benton), Ray Weeks (Chickasaw), Jerry Wilburn (Itawamba), John A. Rasberry (Lee), Dr. Marian W. Godbey (Monroe), Harry I. Gillespie (Pontotoc) and John M. Davis (Union). Rasberry is chairman.

Region Five: Paul Braswell (Bolivar), Mrs. W. T. Touchberry (Issaquena), Mrs. S. M. Montgomery (Sharkey) and James L. Robertson (Washington). Robertson is chairman.

Region Seven: Howard A. Stranathan (Clay), George J. Schweizer, Jr. (Lowndes) and Dr. L. H. Brandon (Oktoberfest). Schweizer is chairman. No appointments have been reported to the MIC as yet for Choctaw, Noxubee, Webster and Winston.

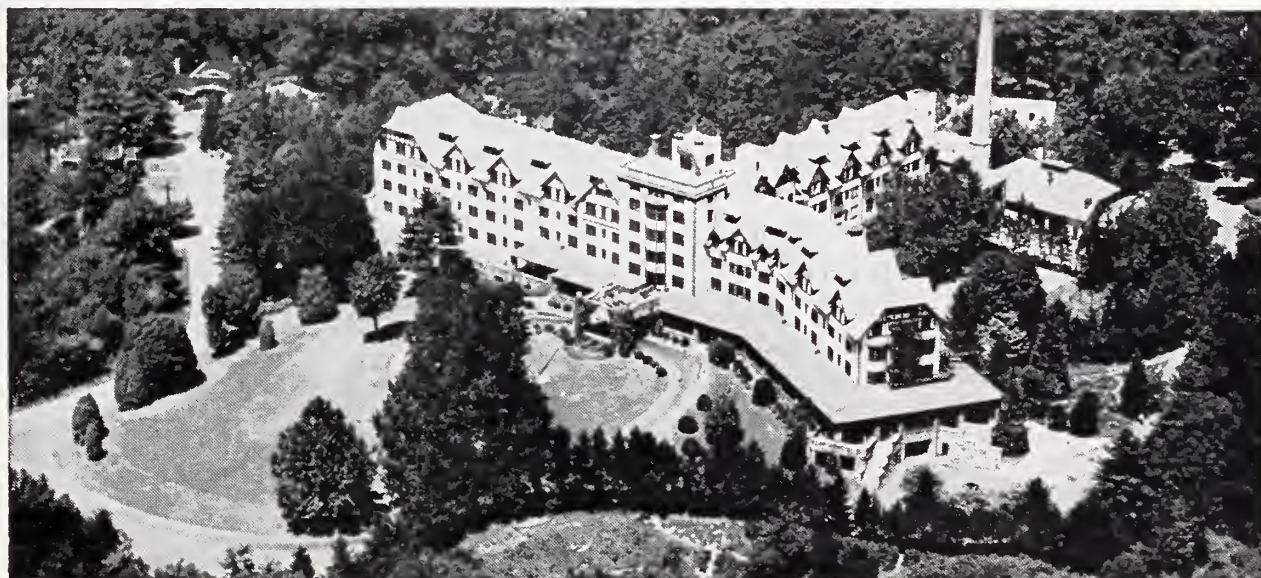
Region Fourteen: The Jackson county board of supervisors has named James Lanham, of Pascagoula, as a representative, but no representative has been named for George county.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habitation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.



in chronic illness

B and C vitamins are part of therapy: An imbalance of water-soluble vitamins and chronic illness often go hand in hand. STRESSCAPS capsules, containing therapeutic quantities of vitamins B and C, are formulated to meet the increased metabolic demands of patients with physiologic stress. In chronic illness, as with many stress conditions, STRESSCAPS vitamins are therapy.



Stresscaps[®]
Stress Formula Vitamins Lederle



Each capsule contains:
Vitamin B₁ (as Thiamine Mononitrate) 10 mg
Vitamin B₂ (Riboflavin) 10 mg
Vitamin B₆ (Pyridoxine HCl) 2 mg
Vitamin B₁₂ Crystalline 4 mcgm
Vitamin C (Ascorbic Acid) 300 mg
Niacinamide 100 mg
Calcium Pantothenate 20 mg
Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

Lederle

628-6-36

New, Expanded Council on Scientific Assembly Plans for 100th Annual Session

The new and expanded Council on Scientific Assembly is already at work on the 100th Annual Session of the state medical association which is slated for Jackson, May 13-16, 1968. Headquarters for the event will be the Hotel Heidelberg.

This is the announcement of Dr. Walter H. Simmons of Jackson, chairman of the council. He was named to one of the three top general officers posts, that of secretary-treasurer, during the May meeting at Biloxi. In this capacity, he is also charged with heading the scientific activities of the



Dr. Walter H. Simmons of Jackson, new association secretary-treasurer and chairman of the Council on Scientific Assembly, plans for the 100th Annual Session in 1968.

association. Dr. Simmons explained that the 100th Annual Session is not the centennial of the association's founding. The association was organized December 15, 1856, and celebrated its birthday centennial at Jackson in 1956 when the then-new Central Office Headquarters Building was formally opened.

"Because of the Civil War and the difficult reconstruction period," Dr. Simmons said, "the association experienced a lapse of formal activities for 12 years, and hence, our annual sessions lag chronologically when compared to the age of the organization."

He said that the council is planning "a very special program of outstanding quality for the 100th Annual Session," making for a "second" centennial observance in the same century.

At the recent May conclave at Biloxi, the Council on Scientific Assembly was expanded to 15 voting members from its former total of eight. In 1966, the By-Laws were amended by the House of Delegates to provide for the election of section secretaries for three year terms, thus providing continuity for the council. The first such elections were conducted this year at Biloxi.

Section chairmen are still elected to serve only one year. With the implementation of the new provisions in the By-Laws, the section secretaries were also made voting members of the House of Delegates. Section chairmen have been voting members since the major reorganization of the association in 1958. The purpose of delegate status for section officers, Dr. Simmons said, is to assure adequate representation of the Scientific Assembly in the policy-making body.

Named to head the seven sections for the new year are Drs. John E. Green of Hattiesburg, chairman, and Emmett M. Herring, Jr., of Hattiesburg, secretary, EENT; C. R. Jenkins of Laurel, chairman, and Hardy B. Woodbridge, Jr., of Jackson, secretary, General Practice; and William C. Kellum of Tupelo, chairman, and C. Ralph Daniel, Jr., of Jackson, Medicine.

Heading other sections are Drs. John E. Lindley of Meridian, chairman, and J. Purvis McLaurin, Jr., of Oxford, Ob-Gyn; Charles P. Tharp of Tupelo, chairman, and William F. Sistrunk of Jackson, secretary, Pediatrics; Rhea L. Wyatt of Holly Springs, chairman, and Frank J. Morgan, Jr., of Jackson, Preventive Medicine; and Ray-

ORGANIZATION / Continued

mond S. Martin, Jr., of Jackson, chairman, and Carl D. Brannan of Jackson, Surgery.

Since the new provisions in the By-Laws applying to section secretaries require staggered terms, two were elected for one year initially, two for two years, and three for three years.

The secretaries of the Sections on General Practice, Dr. Woodbridge, and EENT, Dr. Herring will serve one year. Dr. McLaurin of Ob-Gyn and Dr. Morgan of Preventive Medicine will serve two years until 1969, while Dr. Sistrunk of Pediatrics, Dr. Brannan of Surgery, and Dr. Daniel of Medicine will have full, three year terms until 1970.

The 100th Annual Session will follow the general format established two years ago which permits the conduct of the House of Delegates without conflict with the Scientific Assembly. Present plans call for the House to be convened on Monday, May 13, 1968, for a morning meeting with reference committee hearings set for the afternoon.

The Scientific Assembly will be formally opened on Tuesday morning, May 14, with morning and afternoon general scientific sessions. The practice of conducting concurrent scientific section meetings has been discontinued, except for Pediatrics and EENT.

The 1968 scientific program will extend from May 14 through noon on May 16 with the adjourned meeting of the House of Delegates set for that afternoon.

Fifteen specialty societies and at least four medical alumni groups are tentatively expected to join in concurrent meetings during the 100th Annual Session, Dr. Simmons said. There will be



New officers of the Section on Ob-Gyn are Drs. J. Purvis McLaurin, Jr., secretary, and John E. Lindley, chairman.

a major, association-wide social event, probably on Wednesday evening, he added.

At the recent 99th Annual Session, the House of Delegates voted to conduct the 1968 session at Jackson, fulfilling contracts with hotels in the capital city, but subsequent annual sessions will be scheduled for the Mississippi Gulf Coast until such time as the Jackson hotels are able to offer better convention facilities.

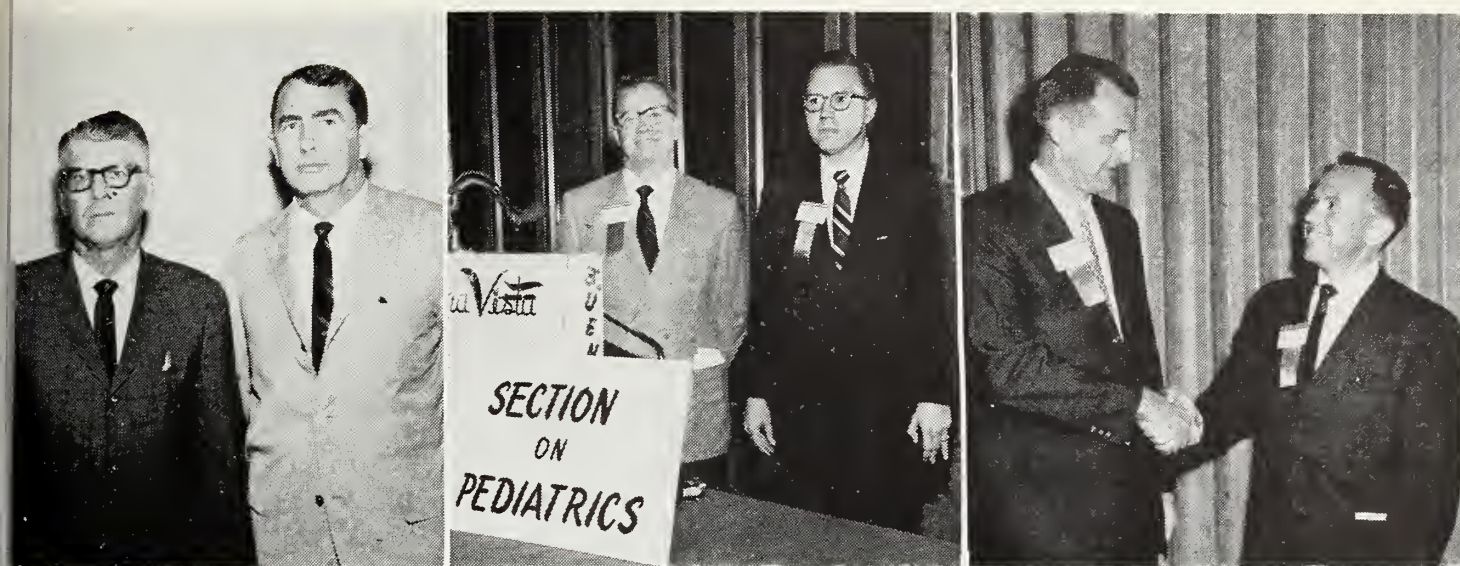
The 101st Annual Session for 1969 has already been contracted to the Buena Vista Hotel and Motel, and dates for the 1970 meet have been firmed. In 1966, the association adopted the policy of maintaining a four year advance convention schedule because of difficulties encountered in the year-to-year scheduling.

Reports to the House of Delegates this year stated that Jackson convention facilities are actual-



Named to head three scientific sections are, from the left, Medicine, Drs. William C. Kellum, chairman, and C. Ralph Daniel, Jr., secretary; EENT, Drs. Emmett M. Herring, Jr., secretary, and John E.

Green, chairman; and Preventive Medicine, Drs. Rhea L. Wyatt, chairman, and Frank J. Morgan, Jr., secretary.



Planning top programs for 1968, from the left, are these section officers: General Practice, Drs. C. R. Jenkins, chairman, and Hardy B. Woodbridge, Jr., secretary; Pediatrics, Drs. Charles R. Tharp, chair-

man, and William F. Sistrunk, secretary; and Surgery, Drs. Carl D. Brannan, secretary, and Raymond S. Martin, Jr., chairman.

ly diminishing, while those on the Gulf Coast are steadily improving and increasing in numbers. A second major Jackson hotel, the King Edward, was closed last spring, and the Robert E. Lee was closed in 1966.

The all-new Jackson Downtowner, the former Walthall, offers new and modern rooms and suites, but it has insufficient meeting and exhibit space to

accommodate the state medical association's substantial requirements.

Dr. Simmons noted that 1967 registration at Biloxi was almost identical to 1966 registration at Jackson. Attendance potential for a Jackson meeting is almost double that on the Coast, but members and their families seem to be eager to make the trip south for Coast attractions.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761

Burnstein Library Is Memorial Gift to UMC

The personal, professional library of the late Dr. Norman Burnstein of Jackson has been given to the Rowland Medical Library at the University Medical Center. Mrs. Burnstein designated the gift in memory of Dr. Burnstein who was killed in an aircraft accident in November, 1965.

The collection contains more than 1,000 volumes with about 600 current, definitive works in endocrinology, biochemistry, cardiovascular disease, and gastroenterology. A specially designed bookplate will identify each volume.

Included in the collection are bound volumes of journals and selected unbound journals in the medical field.

At the time of his death, Dr. Burnstein was clinical assistant professor of medicine at UMC. The tragic mishap claimed five lives, including that of Dr. Ben N. Walker, Jr., of Jackson who was piloting the ill-fated aircraft.

HII Releases Book on Health Education

The Health Insurance Institute has announced publication of a new booklet, "Health Education Materials—and the organizations which offer them."

This 20-page booklet contains an extensive list of sources which make available material on health subjects.

The national organizations listed offer either free or inexpensive informational and educational materials, with those offering free literature to students specifically identified.

The materials available from these organizations are broken down by topic, some of which are accident prevention, aging, air pollution, child care and development, dental health, eyesight, first aid, foot health, health, health careers, hearing, mental health, nutrition, physical fitness, and rehabilitation.

Copies of the booklet can be obtained by writing to Department H, Health Insurance Institute, 277 Park Avenue, New York, N. Y. 10017.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205-836-7201

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 42 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA



UMC Graduates 114 in 11th Commencement, Dr. Pankratz Is Named Dean Emeritus

"Will you be renewed or will you be mummified?" Dr. Joseph Hinsey asked graduates of the University of Mississippi Medical Center when he delivered the 11th annual commencement address to 114 degree recipients.

Dr. Hinsey, director emeritus of Cornell University Medical Center, raised the question in regard to what the new graduates will have done 20 years from now to keep at the top level of their professions. He spoke before 68 graduating physicians, 25 students who earned bachelor of science degrees in nursing and 21 who earned advanced degrees in health sciences.

A record number of 120 students completed degree requirements at the Medical Center this year, some 114 of whom participated in commencement exercises May 28 when Chancellor J. D. Williams conferred degrees. In his first commencement since coming to the University Medical Center as dean and director last February, Dr.

Robert E. Carter presented candidates for M.D. degrees and administered the Hippocratic Oath.

Dean Christine Oglevee presented 25 candidates in the School of Nursing Class of 1967 and Dr. Charles C. Randall, assistant dean in charge of graduate studies, presented candidates for the Ph.D. and master of science degrees in the health sciences.

Top student in the School of Medicine Class of 1967 is Dr. James Brumfield of Jackson, who got the Waller S. Leathers Award presented annually to the most outstanding medical graduate. Theresa Goellner of Lumberton won the Faculty Award as the top graduate in the School of Nursing Class of 1967.

Dr. Hinsey, who first spoke at the Medical Center in 1956 at dedication ceremonies, observed that accomplishments of the Center to the present have "more than justified the hopes of those who worked to bring it into existence."



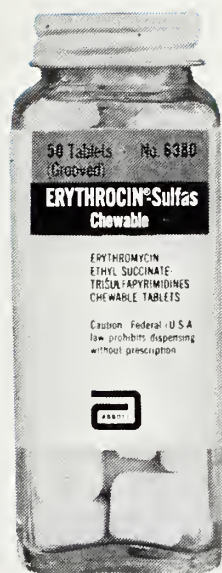
Members of the University Medical Center's 11th graduating class included 68 physicians, 25 degree nurses, and 21 who earned advanced degrees in the

health sciences. Scene of commencement exercises is Mississippi Coliseum.



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN®-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged 4 months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



Dr. David S. Pankratz, a key figure in the establishment of the four-year school and the construction of the multimillion dollar Medical Center, was named to emeritus deanship during the afternoon ceremonies.

Dr. Pankratz served as dean of the School of Medicine from 1945 to 1960 and director of the Medical Center from 1955 to 1960 when he resigned, just short of mandatory retirement. His appointment was announced by Chancellor Williams following action by the Board of Trustees of Institutions of Higher Learning.

"Today great attention is being given to improve the utilization of health personnel and to develop better methods of delivering health services," said Dr. Hinsey, "and your center here has this obligation."

The distinguished medical educator described himself as a "great believer in a balanced academic program" which includes the academic respon-



Dignitaries on hand for commencement ceremonies of the University of Mississippi Medical Center May 28 included Chancellor J. D. Williams; Dr. David S. Pankratz, former dean of the medical school who was named dean emeritus; Dr. Joseph C. Hinsey, commencement speaker; and Dr. Robert E. Carter, dean of the University of Mississippi School of Medicine.

sibilities of research, integration of new material with established knowledge, teaching students at all levels and applying knowledge to patient care at the earliest possible time.

"Teaching centers like yours are being called upon because experience has taught that teaching

and research provide the best environment for the kind of patient care that is desired," he said.

He cautioned the graduates that "the quality of care available to the great mass of our citizens in the future will be dependent on how all who are involved keep renewing themselves and remaining abreast of advances."

The tenth anniversary commencement speaker has been accorded numerous honors for his own personal contributions to medical education throughout the country.

Polish Physician Visits Mississippi's Kosciusko

A Polish woman physician made a sentimental journey to Kosciusko, Miss., when she discovered that the Attala County community was named in honor of her fellow countryman and Revolutionary War hero, Gen. Tadeus Kosciusko.

She is Dr. Aleksandra M. Modrezewska of Warsaw who is currently a visiting staff member at the University Medical Center. She limits her practice in a narrow area of otolaryngology, specializing in hearing and speech problems in chil-

dren. In Poland Dr. Modrezewska is chief of a hospital unit in the Warsaw Medical Center.

During her visit to Kosciusko, the 60 year old physician visited the city hall and chamber of commerce where she viewed records and artifacts relating to the history of the city. She signed a historic guest book which was used for visiting Polish Americans during the city's centennial observance in 1934. Added to the list was Dr. Modrezewska's name on the next line—33 years later.

She is credited with the design of electronic equipment used in treatment of hearing disorders and is the author of a number of books in her field of professional interest. She received her medical degree at the University of Krakow and her postgraduate training in Vienna and Paris.

Initially establishing her practice in Yugoslavia, she returned to her native Poland in 1936. A widow, she has a son in Great Britain, a daughter in Yugoslavia, and two foster sons in Warsaw. She has learned to speak English since her arrival in Jackson.

Dr. Modrezewska plans to return to Poland in July. One of her personal projects is the collection of winter clothing for needy medical students in Warsaw. The Kosciusko Chamber of Commerce has agreed to serve as a collection and shipping center for the project.



**rouTINE TB screening with
TUBERCULIN, TINE TEST**
(Rosenthal) Lederle

A method so rapid and
simple that you just *swab...
uncap...press...and discard.*

Results, read at 48 to 72 hours, are comparable
in accuracy to those of older standard intradermal tests. The
self-contained, disposable unit requires no refrigeration and is
stable for two years. Side effects are possible but rare: vesiculation,
ulceration, or necrosis at test site. Contraindications: none, but use with
caution in active tuberculosis. Available in boxes of 5 and cartons of 25.

 **LEDERLE LABORATORIES**, A Division of
American Cyanamid Company, Pearl River, N.Y.
448-7-4965

MSPB Offers New Film on Blindness

The film "A Fair Chance for Tommy" has recently been added to films made available to the public by the Mississippi Society for the Prevention of Blindness, according to W. P. Woolley of Jackson, president.

The thousands of partially seeing children enrolled in our schools need special equipment, materials and understanding, Woolley said. This documentary film, 16 mm, running time 13 minutes, demonstrates how a properly implemented program gives these partially seeing children "a fair chance" for success in school in order to provide them with a foundation on which to build a satisfying life in the future.

The film was produced by The National Society for Prevention of Blindness on a grant from the American Legion Child Welfare Foundation. The film was purchased by the Capitol Business & Professional Women's Club for the Mississippi Society for Prevention of Blindness.

To help give Tommy "a fair chance" to keep pace with his class, specialized equipment and materials have been developed such as books, with large type, pencils with soft lead, large-size chalk, typewriters with oversize type, magnifying devices, tape recorders and so on.

There are approximately 1200 partially seeing children enrolled in schools of Mississippi, the society said.

Puerto Rico Journal Joins State Group

The state journal group has become multilingual with the recent addition of the *Bóletin de la Asociacion Médica de Puerto Rico*. The publication has become the 34th member of the State Medical Journal Advertising Bureau.

Only 40 state medical journals are published by the 54 state and territorial medical associations which combine to form the AMA. These are the 50 states, District of Columbia, Puerto Rico, the Virgin Islands, and the Panama Canal Zone. Six of the journals are not SMJAB members.

The SMJAB is an Illinois-based corporation owned jointly by the 34 member journals. Its sole task is the sale of national advertising, al-

though it brings the participating states together in a biennial conference. The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION has been a member publication since its inception in 1960.

AAMA Announces Assistant Scholarships

Loans for medical assistant training are now available from the Maxine Williams Scholarship Fund, sponsored by the American Association of Medical Assistants. Each loan is for \$300, and as AAMA assumes all administrative costs, there is no interest rate. Repayment may be made after the student is employed.

Anyone who is a high school graduate, and wishes to take formal training is eligible to apply for a loan. Application blanks are available from AAMA headquarters, 510 N. Dearborn St., Chicago, Ill. 60610.

The fund, named in honor of AAMA's first president, is supported entirely by private contributions. It was established to encourage those wishing to become medical assistants to take formal training, preferably at a school which offers a two-year course.

Rhode Island Sponsors Medical Meet on Sports

The physician who will accompany the crew of the *Dame Patti*, the Australian challenger for the America's Cup in races off Newport in September, is looking forward to talking shop with 200 or so team physicians, trainers and coaches who will be in Kingston, Rhode Island, for two days in August.

The get-together will take place during the Sixth Postgraduate Conference on Medical Aspects of Sports at Keaney Gymnasium, University of Rhode Island, August 17 and 18. It is sponsored by the University of Rhode Island and the Rhode Island Medical Society.

Recently a request for a registration application was received from Dr. A. H. Toyne of Australia by Dr. A. A. Savastano, co-chairman of the conference with Maurice Zarchen, director of athletics at URI. A fellow of the Royal College of Surgeons, Dr. Toyne wrote that he would be in this country during August and September and wished to contact others involved in sports medicine.

Volume VIII
Number 8
August 1967



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
TEMPLE AINSWORTH, M.D.
President
JOSEPH B. ROGERS, M.D.
President-elect
WALTER H. SIMMONS, M.D.
Secretary-Treasurer
WILLIAM E. LOTTERHOS, M.D.
Speaker
JAMES L. ROYALS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

CONTENTS

ORIGINAL PAPERS

Acute Pancreatitis **451** T. J. SAFLEY, JR., M.D.

SPECIAL ARTICLES

- Workmen's
Compensation Forms **455** GEORGE D. PURVIS, M.D.
- Coronary Heart
Disease: Part IV **459** WILLIAM H. ROSENBLATT, M.D.
- Radiologic
Seminar LXIV **464** HUGH C. MCLEOD, JR., M.D.
- Clinicopathological
Conference XC **466** University Medical Center
- Proceedings of the
House of Delegates **475** 99th Annual Session

EDITORIALS

- The Price of People:
Crucial Quantity in
Hospital Costs **495** Personal Services and Dollars
- STP—Sure Route
for a Bad Trip **500** Psychedelic Nightmare
- Doctors Agree—
Moonshine Kills **502** Practical Prevention

THIS MONTH

- The President
Speaking **494** Usual and Customary
- The Literature **507** New Books Reviewed
- Medical Organization **509** RMP for Mississippi
- Meetings **506** 1967-68 Schedules

Copyright 1967, Mississippi State Medical Association

removes the mental blur



that clouds vision

SOLFOTON®

Each tablet or capsule contains
 PHENOBARBITAL 16 mg.
 (Warning: may be habit forming)
 BENSULFOID® (See P D R) 65 mg.
 Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.

Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING
 WITHOUT PRESCRIPTION

AVAILABLE

Solfoton (yellow, uncoated tablets "P")
 100s, 500s, 5000s
Solfoton Capsules (yellow and brown)
 100s, 500s, 1000s
Solfoton S/C (sugar-coated beige tablets)
 100s, 500s, 4000s

WM. P. POYTHRESS & CO., INC.
 RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Insurance Industry Supports Health Planning

Insurance companies endorse the concept of comprehensive community planning of health facilities and services, a spokesman for the Health Insurance Association of America (HIAA) said before the House Interstate and Foreign Commerce Committee hearings at Washington.

The Committee is considering legislation to extend (through Section 2 of H.R. 6418) the comprehensive health planning concept contained in Public Law 89-749, the Comprehensive Health Planning and Public Health Amendments of 1966.

Howard Ennes, Assistant Vice President of the Equitable Life Assurance Society of the United States, stated in his testimony, "We endorse the concept of Section 2 of H.R. 6418, we endorse putting this concept into operation, and we endorse participation of the public in the planning process."

The witness gave two reasons for supporting the participation of consumer representatives in the health planning process:

"First, consumers have a vital interest in both the quality and the cost of health care. Secondly, consumers can bring their own resources of ideas and of energy to the many problems that confront the future of health care in America."

Mr. Ennes said that "in a very real sense" people in the health insurance business are representatives of consumers—"of some 95 million people who have private health insurance with insurance companies." Then he added:

"We recognize both the public interest and a business interest in health care. In fact, the public interest and the business interest are essentially the same—for we want for the health consumer the same things the health consumer wants for himself and his family: access to quality care at reasonable cost."

P. L. 89-749, the insurance spokesman said, appears to emphasize the pluralistic nature of the health planning process. Under this law, he pointed out, decisions are reached and acted upon by the voluntary, professional, and governmental sectors concerned with the delivery of health care in cooperation with consumers' representatives.

In the view of the insurance business, Mr. Ennes observed, the approach of P.L. 89-749 presents a "new and welcome" advance in relations between government and the private sector. He then described the readiness of the insurance business to participate in this approach to the problem of efficient delivery of quality health care to the public.

"We have expanded the scope of our Health Insurance Council which through its 50-state network," he said "has over 20 years served as our liaison with the providers of health care—the hospitals, the physicians, dentists and other professions with a community of interest in health care and its financing.

"A special 'Health Insurance Council project for Community Health Action-Planning' has been created. We refer to this project as 'HICHAP.' Our HICHAP program is geared to provide experienced and competent personnel of insurance companies for participation in community health planning activities where they may be needed and can serve usefully in the public interest.

"To back up our manpower, we are organizing to expand our information programs to include trends and developments in comprehensive community health planning, and to provide additional research data and other information in the field of health insurance as it will relate to planning activities."

Lilly Cuts Quinine, Quinidine Prices

Prices of quinine, quinidine, and colchicine products, forced upward in recent years by spiraling costs of raw materials, have been cut by Eli Lilly and Company. The reductions are approximately 10 per cent for quinine formulations, 15 per cent for quinidine, and 16 per cent for colchicine products.

Raw materials costs to the Lilly Company increased sharply in recent years. In 1966 the company paid five to six times as much for quinine and quinidine as it had paid two years earlier. The cost of colchicine rose even more sharply.

In the face of such increases, the company last year was forced to raise prices of its formulations of the three drugs, but the changes were nothing like those seen in raw materials costs.

A Lilly spokesman said the current price cuts are possible because Lilly economists have projected lower and more stable costs for raw materials in the future.

"It is our policy," the Lilly spokesman said, "to make available to patients the anticipated savings as soon as possible. These products must be taken over long periods of time because of the chronic nature of the illnesses they treat. It is important that any hardships worked by the temporary high prices due to raw materials costs be minimized as soon as practicable."

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

*The
fast-disintegrating
uncoated tablet
gives relief in
15 minutes*

Each tablet contains:

Potassium Iodide 195 mg.
Aminophylline 130 mg.
Phenobarbital, Caution: May be habit forming . . . 21 mg.
Ephedrine HCl 16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of
water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856





For individuals and families

Blue Cross-Blue Shield offers worry-free health care protection that can be handled entirely by mail!

MAIL COUPON TODAY. We will then send you our new Enrollment Kit which contains everything you need to apply for membership in Blue Cross-Blue Shield by mail. **You do not send money with your application, and no representative will call on you.** We are doing everything we can to make it easy for you to apply for membership and join Blue Cross-Blue Shield.

Through its wide choice of plans, Blue Cross-Blue Shield has kept pace with modern hospital and medical costs. Only your Blue Cross Plan provides "hospital service benefits" . . . which pay for most hospital services in full, regardless of the amount used. New Blue Shield coverage with Higher Surgical and Medical benefits is now available to help meet today's higher cost of medical care. Dollar for dollar, Blue Cross-Blue Shield is today's best protection for hospital and doctor bills.

(FILL OUT, CUT ALONG DOTTED LINE AND MAIL TODAY.)

BLUE CROSS-BLUE SHIELD

P. O. Box 1043, Jackson, Mississippi 39205

I am interested in obtaining complete information about Blue Cross-Blue Shield protection.

- | | |
|---|---|
| <input type="checkbox"/> Individual membership | <input type="checkbox"/> Family membership |
| <input type="checkbox"/> Increased benefits (my contract number is _____) | |
| <input type="checkbox"/> Cancer protection | <input type="checkbox"/> Over age 65 special benefits |
- (please print)

NAME _____

STREET _____

CITY _____ STATE _____

TELEPHONE NO. _____ AGE _____

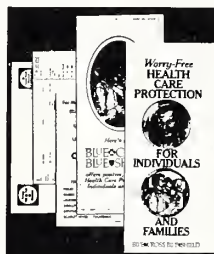
PLACE OF EMPLOYMENT _____

NOTE: Check here ☐ if you own or manage a business with five or more employees and wish information about our Employee Group Plan.

MISSISSIPPI HOSPITAL AND MEDICAL SERVICE

QUESTIONS AND ANSWERS ABOUT OUR NEW ENROLL-BY-MAIL PLAN

- Q. Who is eligible to join for non-group membership?
- A. If you are self-employed, work where there are less than 10 employees, or retired, you may apply for non-group membership. If you are age 65 or over, there is a special Blue Cross-Blue Shield benefit plan available to supplement your "Medicare" program.
- Q. How do I receive information on non-group membership?
- A. Check the coupon to indicate the information desired; complete the remainder of the coupon and mail to Blue Cross-Blue Shield, P. O. Box 1043, Jackson, Mississippi 39205. An enrollment kit will be mailed to you immediately. No



obligation, of course.

- Q. What will I receive in this new enrollment kit?
- A. An information-packed folder (including rates), membership application, business reply envelope and cancer leaflet—everything you need for applying for Blue Cross-Blue Shield quickly and easily by mail.
- Q. After receiving kit, how do I apply for membership?
- A. Simply choose the room allowance and medical-surgical schedule you prefer, then complete the application for membership and mail to Blue Cross-Blue Shield in postage-free envelope.

BLUE CROSS BLUE SHIELD

MISSISSIPPI HOSPITAL & MEDICAL SERVICE / P. O. BOX 1043 / JACKSON, MISS. 39205

Medical Society Urges Physician for Coroner

The Homochitto Valley Medical Society has unanimously adopted a resolution calling for election of a physician as coroner of Adams County and endorsing the candidacy of Dr. Leo J. Scanlon, Jr., of Natchez.

The resolution stated that "the Homochitto Valley Medical Society expresses its support and endorsement of Dr. Scanlon as their candidate for coroner" and that "the physicians of the Homochitto Valley Medical Society, both individually and severally, endeavor to seek and promote the election of Dr. Scanlon to the office of coroner of the County of Adams, State of Mississippi."

Over the past 20 years, a number of component medical societies of the state medical association have taken the position that physicians should seek the coroner's office. Official bodies of the association have also expressed the belief that the state should appoint a medical examiner who is qualified in forensic pathology.

Medical Aspects of Sports Meet Slated

The 9th National Conference on the Medical Aspects of Sports, sponsored by the American Medical Association under the auspices of its Committee on the Medical Aspects of Sports, will be held in Houston, Texas, at the Hotel America on Nov. 26, 1967. The conference is held annually in conjunction with and on the first day of the Clinical Convention of the American Medical Association.

As was true of the previous eight conferences, the 9th will cover a wide range of subjects of interest to those serving school and college athletic programs. Included will be forums and discussion sections relating to prevention of knee injuries, sports cardiology, and quackery in sports. Two sessions will be devoted to a series of common clinical conditions of rather variable significance in the athletic setting (e.g., gastroenteritis, concussions, genitourinary tract injuries, and rib injuries). At the conference luncheon, Dr. Eduardo Hay, Director General of the Centro Deportivo Olímpico Mexicano, will discuss the preparations for the 1968 Olympic Games.

The conference is open to key nonmedical athletic personnel as well as interested physicians.



After the picnic even Gramps Was a victim of intestinal cramps

Parepectolin for quick relief of acute diarrhea
... soothes colicky pain with paregoric*
... consolidates fluid stools with pectin
... adsorbs irritants with kaolin,
and protects intestinal mucosa

In elderly patients it is particularly important to stop the diarrhea fast. Parepectolin helps you control diarrhea promptly and gain the patient's confidence until etiology has been determined.



Parepectolin[®]

Each fluid ounce of creamy white suspension contains:

*Paregoric (equivalent) (1.0 dram) 3.7 ml.
Contains opium (¼ grain) 15 mg. per fluid ounce.

warning: may be habit forming

Pectin (2½ grains) 162 mg.
Kaolin (specially purified) (85 grains) 5.5 Gm.
(alcohol 0.69%)

Usual Adult Dose: One or two tablespoonfuls three times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.



"You're up ten pounds since your last physical. We're going to have to do something about that."

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

August 1967

Dear Doctor:

The American Academy of Pediatrics has formally questioned the necessity for a family practice specialist as proposed in the Millis Report. AAP says that educational recommendations do not outline a new specialty, contending that the GP specialist is really in a "non-specialty."

AAP recommends group practice with internists and pediatricians acting "as the primary physicians for families." Statement points out that pediatricians and internists "are already committed to rendering" comprehensive medical care.

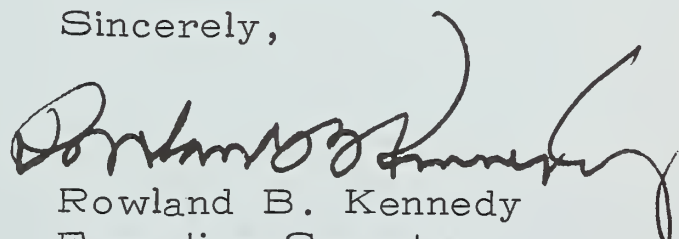
Top Pentagon brass were shaken up to discover last week that a Philippine mess steward who serves Secretary McNamara turned up with leprosy. About 85 high Defense officials eat in the Secretary's mess. Dr. Shirley Fisk, DOD's Assistant Secretary for Health, says that none is in danger from exposure.

All five Mississippi congressmen have been alerted to a proposed amendment to put chiropractic services in Medicare's Part 1-B. House Ways and Means Committee has been considering changes for 1967, and pressure for chiropractic has been heavy. AMA and virtually every state medical association, including MSMA, have filed opposition statements.

Two suits in different federal courts on liability in cancer deaths have produced exactly opposite rulings. A suit in Connecticut against the American Tobacco Co. for liability in cancer death of a smoker was dismissed, while a plaintiff widow was awarded damages in New York for a cancer death 12 years after the deceased inhaled zylol and resin fumes, held to be causally connected. The tobacco suit was the 50th one for cancer death, all of which have been unsuccessful.

The theatrically-staged "hunger hearings" at Washington are still simmering in the halls of the Senate and executive offices of government. Testimony on mass starvation and untreated disease in Mississippi was clearly prejudiced, generally without credibility, and in many areas, patently inaccurate. Further developments will be reported.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

SSA Firms New Medicare Appeal Regulations

Washington - The Social Security Administration has published new regulations for appeals where either the over-65 beneficiary or physicians may call for a review of the carrier's payment under Part 1-B. Two twists in the regulations leave something to be desired: The carrier does his own reviewing, and the physician enjoys the appeal recourse only if he has accepted assignment on the claim. SSA will, it says, check on carriers.

New AMA Film Examines Illegitimate Pregnancy

Chicago - The title is "Three Faces in Limbo," and it is a new hard-hitting film which examines in depth the subject of illegitimate pregnancy. Three common situations are portrayed: The teen-age couple, the young adults of legal age, and the mature working couple. A professional panel discusses problems relating to mother, child, and physician from medical, emotional, social, and legal viewpoints. Bookings from AMA Film Department.

AABB And ARC Reach Agreement On Blood

Washington - The American Association of Blood Banks and the American Red Cross have signed a joint agreement on exchange of blood and blood credits on a nation-wide basis. The agreement, replacing one reached in 1961, will establish reciprocity among 1,000 community and hospital banks represented by AABB and 1,700 Red Cross chapters. Agreement signals detente in previously stormy relations between these major organizations.

Audio 'Reading' Speed Of Blind Can Be Doubled

Arlington, Va. - The U.S. Public Health Service National Center for Chronic Disease Control believes that blind people can be trained to understand tape recorded voices when played at twice the recorded speed. Arizona State University has developed a special recorder/player with variable speed for training those with this sensory aptitude. Advantage is that the blind could increase "reading" speed from 90 words per minute with Braille to double the 250 wpm rate of sighted high school students.

Businessmen Protest OEO's Mail Privileges

San Mateo, Calif. - The National Federation of Independent Business has protested the Office of Economic Opportunity's exemption under Postal Laws allowing it immunity to limitations imposed on other government agencies. Under special ruling, OEO may make mailings to any citizen without a request for information, whereas other agencies may use mails only when a citizen asks for information. NFIB allows that this may be one solution to postal deficit.



ORIGINAL PAPERS

Acute Pancreatitis

T. J. SAFLEY, JR., M.D.
Jackson, Mississippi

AT THE MISSISSIPPI BAPTIST Hospital during the period Jan. 1, 1949, through Dec. 31, 1966, there were 296,888 discharges; 535 of those discharged had a diagnosis of pancreatitis; an incidence of 0.17 of 1 per cent. This included all forms, including chronic pancreatitis. Of interest in looking at these statistics is the fact that during the first year of this survey, 13,117 patients were discharged, of whom five had a diagnosis of pancreatitis which is an incidence of 0.03 of 1 per cent. I think there are many cases admitted to the hospital following subsidence of a lesser episode of pancreatitis and a diagnosis is never made. I believe the occurrence of this disease is much greater than is apparent. This paper will review the incidence, diagnosis and treatment of pancreatitis.

J.A.B. was admitted to the Mississippi Baptist Hospital on the night of Dec. 12, 1949, with a history of having had increasing discomfort in the upper abdomen associated with nausea. He had a known history of gall stones. Serum amylase was 1,585 units with a normal range of 40 to 150. Diagnosis of acute pancreatitis was made, and he was placed on a regimen of Levine suction, intravenous fluids, nothing by mouth and celiac ganglion blocks.

At operation, he had fat necrosis scattered about over the abdomen and a hard, enlarged pancreas. The gallbladder was found to be full

of small stones. It was felt that he also had a stone impacted in the ampulla of Vater. Because of the involvement of the pancreas, it was felt that the procedure of choice would be a cholecystojejunostomy using the Roux-Y technique with a retrocolic anastomosis. His course subsequently was benign, and he was discharged from the hospital Dec. 29, 1949, and is at present living in Birmingham, Ala., and as far as I know is in good health.

Of the 296,888 discharges at the Mississippi Baptist Hospital from Jan. 1, 1949, through Dec. 31, 1966, 535 had a diagnosis of pancreatitis. The author discusses the incidence, diagnosis and treatment of this disease and presents case reports.

ing in Birmingham, Ala., and as far as I know is in good health.

L.E.B., a 29-year-old farmer, was admitted to Baptist Hospital on July 23, 1957. During the past two years he had been hospitalized 10 times for a peptic ulcer. On closer questioning, it turned out that each time he had been in the hospital, he was admitted with severe abdominal pain as a result of a drinking bout. X-rays in the hospital failed to show a peptic ulcer, and he was discharged on July 25, 1957, with a diagnosis of alcoholic gastritis.

Subsequent course and retrospective thinking convinces me that he possibly at that time was

Read before the 87th Semi-Annual Meeting, Delta Medical Society, Drew, April 12, 1967.

having also pancreatitis, associated with his alcoholic bouts. I say this because we have followed him since his first admission, and he has become progressively worse. At the present he has chronic pancreatitis with stones in pancreatic ducts and is a dope addict. He refuses to have anything done for fear that we will tell him he can no longer drink alcohol.

J.J.R., a 49-year-old painter, who was an alcoholic, was admitted to the Baptist Hospital on Feb. 1, 1959, with the diagnosis of an acute obstructive duodenal ulcer. Subtotal gastric resection was performed and a long loop anticolonic gastrojejunostomy was done. He was discharged on Feb. 17, 1959. He was readmitted four days later, on Feb. 21, 1959, with the story that he had bent over at home to get something out of the ice box when he was struck by a sudden severe pain in the epigastrium. Upon admission, except for severe epigastric pain and some tenderness, he presented no unusual history and no findings. We suspected a pancreatitis. An amylase determination was 89 units with a normal range of 40 to 150 units.

He continued to complain of his pain and discomfort and on Feb. 29, one week later, he had a serum amylase of 1,447 units. We elected to treat him conservatively, but his course continued to go downhill, and he was re-explored. Upon exploration he was found to have a volvulus with the afferent loop of the jejunum prolapsed posterior to the gastroenterostomy with a definite obstruction of the afferent loop. This volvulus was reduced and the opening through which the volvulus had occurred closed. He made an uneventful recovery and returned to work. He subsequently died with cirrhosis of the liver from his alcoholism.

ETIOLOGY IS UNKNOWN

The exact etiology of pancreatitis is unknown. However, we know that certain factors associated with the development of pancreatitis are obstruction at the ampulla of Vater and alcoholism. These two factors vie for prominence and in some series of reported cases, one occurs more frequently and in others, the other. Many cases occur apparently spontaneously. Surgical and other trauma and mumps are also factors.

The pathological processes associated with the development of pancreatitis are believed to be as follows: obstruction to the flow of pancreatic juice is followed by distention and rupture of the

acini. Then there is a chemical autolytic pancreatic necrosis and edema. As a result of the edema, there is compression on the blood vessels and obstruction to the flow of blood and venous distention occurs. The autolytic process involves the blood vessels and then hemorrhagic pancreatitis occurs. As early as 1862, Panum¹ produced pancreatic hemorrhage by injecting wax into the pancreaticoduodenal arteries of animals. More recently, Pfeffer² demonstrated that micro-embolization causes severe pancreatitis. The severity of the pancreatitis was inversely proportional to the size of the microspheres injected. This suggests that obstructing the larger arteries did not interfere with the collateral blood supply to the pancreas as much as the smaller.

BLUME'S INVESTIGATION

In 1897 Blume³ produced pancreatitis by digital compression of the artery and found that a 10 minute period of ischemia caused pancreatic necrosis. Adams and Musseleman⁴ produced massive pancreatic necrosis by ligation of the pancreatic veins. They compared these changes with the wet gangrene which occurs after the venous occlusive phenomenon as seen in intestinal strangulation. In acute pancreatitis there is an hepatic outflow block as a result of altered portal hemodynamics, and there is an increase in portal hypertension. These two factors which include the entrapment of blood and liver secretions associated with the outflow of fluid into the edematous pancreas produce a marked decrease in circulating blood volume.

Anderson and his associates⁵ believe that as a result of the edema and autolytic digestion of the pancreas there is a passage of red cells into the lymphatic system. This produces a block in the lymphatic circulation and as a result the lymphatics in the pancreas become distended with fluid and red cells, thus adding to the relative blood volume loss.

Ryan and associates⁶ showed that in acute hemorrhagic pancreatitis the blood volume and plasma volume were reduced 20 and 30 per cent respectively four hours after producing an acute lesion. As a result of these factors associated with restriction of circulation there is a 40 per cent loss of plasma volume within six hours of the onset of an acute attack. With this hypovolemia, the general circulation responds by the diversion of blood to the areas of greatest needs and there is peripheral vaso-constriction which reduces the supply of oxygenated blood to all abdominal organs, including the pancreas. Thus, a reduced ar-

terial inflow is superimposed upon an impaired venous and lymphatic outflow and ultimately the pancreatic circulation is so restricted that hypoxia results and the necrosis is enhanced.

The symptomatology of acute pancreatitis in the well-developed case is diagnostic. There is a history of a sudden onset of pain with what has been described as illimitable agony. The patient lies perfectly still in contradistinction to a patient with biliary colic who is constantly moving around in an effort to find a position in which he can be comfortable. As mentioned before, soon after the onset of the severe necrosis there is shock. As a result of this shock and constriction of the peripheral circulation, the face may become cyanotic and the patient becomes dyspneic. There is a slate blue color to the abdomen. When a patient presents with these symptoms, one can be certain that the patient has pancreatitis.

However, this patient also has a recovery expectancy of somewhere between 0 and 20 per cent, as in the best managed series there is a mortality rate of 80 per cent. One should strive for early recognition of this disease. During this particular time, the symptomatology is simply one of pain. This usually is epigastric in location and often extends posteriorly into the back and occasionally seems to go around the side, particularly to the left. However, there may be pain also around the side to the right. Unless a physician puts uppermost in his mind the diagnosis of a possible pancreatitis when a patient presents with epigastric distress or sudden severe onset of epigastric pain, he is certain to miss a good number of pancreatic lesions.

The laboratory findings early in the onset are not diagnostic and late in the disease are of little help. The most important single laboratory determination is serum amylase. This becomes elevated within 6 to 24 hours after onset of the disease and often returns to normal within 48 to 72 hours. The serum lipase is elevated, but it rises after the amylase rises and persists longer than the amylase. In 10 per cent of the cases there is a glycosuria, and hyperglycemia is common. When there is a combination of glycosuria and hypoglycemia in a patient with epigastric discomfort, there is a high incidence of pancreatitis.

TREATMENT REGIMEN

The treatment of pancreatitis resolves into one of supportive therapy and an attempt to combat the changes which we have mentioned above. First and foremost is putting the pancreas to absolute rest, making an effort to relieve by conservative measures, if possible, the obstruction to the

pancreatic flow. Consequently, the patient is given a parasympathomimetic drug, such as atropine, in order to reduce if possible the pancreatic secretions and relax the sphincter of Oddi. The stomach and intestinal tract must be put at absolute rest by the insertion of a Levine tube connected to a low pressure Gomco suction. Fifty cc. of normal saline are injected slowly through the Levine tube every 4 to 6 hours. In addition to measures to combat pain, the patient is rather heavily sedated. The immediate administration of intravenous fluids is indicated.

THE STANLEY PAPER

Approximately three years ago at Cleveland, Miss., Dr. Tom Stanley presented a paper on the use of central venous pressure in shock producing conditions. As you will remember, this involved the placement of a polyethylene tube into the superior vena cava through either the subclavian or one of its tributaries in the left upper extremity and the monitoring of central venous pressure. Fluids, preferably Lactated Ringers solution, must be administered rapidly enough to keep this venous pressure at the desired level.

Since the improvement of circulation to the pancreas is paramount, injection of the celiac ganglia should be done. The site of injection is at the lower border of the 12th rib, 7 cm. from the midline. The needle is inclined 30° to the sagittal plane of the body and inserted until it strikes the side of the vertebra. It is then advanced 1½ cm. and 10 cc. injected. Repeat above and below this point. This should be repeated at least daily and more frequently if the symptoms do not improve. This regimen must be followed until a marked improvement in the patient's condition develops. When the pancreatitis has subsided, diagnostic studies may be made. Of course, in a patient who is known to have gall stones, diagnostic studies may be waived and when the patient's condition warrants, an exploration may be done.

For those who have obstructive phenomena in the common duct, it is my feeling that a cholecystojejunostomy of the Roux-Y type should be done rather than extensive procedures on the common duct. My reason for this is the likelihood of a constriction of the duct following healing of the pancreatitis. In chronic pancreatitis in which there is a development of cysts and stones, the treatment of choice is incising the pancreatic duct from head to tail and doing a pancreaticojejunostomy of the Roux-Y type. For the patient who does not respond to conservative measures and whose progress is progressively downhill, one may

seriously consider doing simply a cholecystostomy in order to afford drainage.

You will note that I have not mentioned the use of Trasylol in the treatment of pancreatitis. It has been definitely demonstrated that if this drug is given at the time of institution of pancreatitis in laboratory animals there is a marked reduction in mortality rate. However, there has been no convincing evidence, to the present time, that the use of Trasylol in the human has had any appreciable effect on the mortality rate. ★★★

935 North State St. (39201)

REFERENCES

1. Panum, P. L.: Experimentelle Beiträge zur Lehre von der Embolie, *Virchows Arch. Path. Anat.* 25:308, 1862.
2. Pfeffer, R. B.; Lazzarini-Robertson, A., Jr.; Safadi, D.; Mixter, G., Jr.; Secoy, C. F., and Hinton, J. W.: Gradations of Pancreatitis, Edematous Through Hemorrhagic, Experimentally Produced by
3. Controlled Injection of Microspheres into Blood Vessels in Dogs, *Surgery* 51:764, 1962.
4. Blume, F.: Zue Frage der Intravitalen Selbstverdauung des Pankreas. In *Beiträge zur wissenschaftlichen Medizin Festschrift dargebotenden medicinischen Theilnehmern Ander LXIX. Versammlung deutscher Naturforscher und Ärzte vom herzoglich Braunschweigischen Staatsministerium*, Brunswick, 1897, p. 132.
5. Adams, T. W., and Musseleman, M. M.: Pancreatic Venous Thrombosis as an Etiologic Factor in Acute Necrotizing Hemorrhagic Pancreatitis, *S. Forum* 4:401, 1953.
6. Sim, D. N.; Duprez, A., and Anderson, M. C.: Alterations of the Lymphatic Circulation during Acute Experimental Pancreatitis, *Surgery* (accepted for publication).
7. Ryan, J. W.; Moffat, J. G., and Thompson, A. G.: Role of Bradykinin System in Acute Hemorrhagic Pancreatitis, *Arch. Surg.* 91:14, 1965.
8. Stanley, Tom: Personal Communication.
9. Anderson, M. C.; Schoenfeld, F. B.; Iams, W. B., and Suwa, M.: Circulatory Changes in Acute Pancreatitis, *Surg. Clin. N. Amer.* 47:127, 1967.
10. Grazinger, K. H.: Pancreatitis: Progress in Management, *Surgery* 59:319, 1966.
11. Singh, L. M., and Howard, J. M.: Studies of Trasylol, *A.M.A. Arch. Surg.* 91:635, 1965.
12. Silen, W.; Baldwin, J., and Goldman, L.: Treatment of Chronic Pancreatitis by Longitudinal Pancreaticojunostomy, *Am. J. Surg.* 106:243, 1963.

VERBAL ECONOMY

A lad of nine years of age had spent his life as a mute, never having uttered a word. One morning at breakfast he exclaimed in a loud, clear voice, "Take these eggs away—they're terrible!"

"Oh, Jackie," said his happily astonished mother. "You can talk."

"Of course I can talk," retorted Jackie.

"Then why have you never spoken a word in nine years?" she asked.

"Because up to now, everything was fine."



Workmen's Compensation Forms

GEORGE D. PURVIS, M.D.

Jackson, Mississippi

"I WANT TO PRACTICE medicine, not be embroiled in paper work and red tape," is a statement we all have made or heard made. However, paper work and red tape is now such a part of the woof and warp of the fabric of medical practice that none of us can avoid it. Therefore, delaying it, putting it in the bottom of the basket, or ignoring it only penalizes the patient who has paid for coverage by his premiums or by his work, or hits the physician's own pocket book by delaying payment for his services.

Legislation enacted in 1948 in Mississippi provided for Workmen's Compensation for on the job injuries. This has been a boon to the workman in many respects in supplying medical treatment and assisting in his return to gainful employment as rapidly as possible. The act requires that the treating physician supply the employer (or carrier), employee and the Workmen's Compensation Commission with reports in regard to the injury, its treatment, and results.

Standardized forms have been created to expedite this reporting. The required forms are the B-9 form or initial form and the B-27 form or Final Medical Report. Across the top of the Form B-9 (Figure 1) is written, "The use of this form is required under the provisions of the Mississippi Workmen's Compensation law and must be filed immediately following the initial diagnosis of the injury by the physician." On the Form B-27 (Figure 2) is written, "Important—This blank must be filled out and mailed to the company on the day treatment terminates."

These reports are excluded from privileged patient-physician information by the statute. Therefore, if a physician is not willing to abide by the

law in regard to these patients, he has no alternative except to refuse to treat Workmen's Compensation cases which he can do except to supply emergency first aid if required to save life or alleviate suffering. Otherwise, if he treats patients covered by this law, he is bound to supply information necessary to the processing or adjudication of the claim.

Since such standardized forms are brief and only cover the initial and final report, the physi-

"Paper work and red tape," writes the author, "is now such a part of the woof and warp of the fabric of medical practice that none of us can avoid it." He discusses in detail the standardized forms devised for the reporting of information in connection with Workmen's Compensation.

cian should supplement them with details which will clarify and progress notes for cases which are prolonged. If the physician keeps a form handy when making his own records of a case, he will find that he can record all pertinent information briefly. Such information can then be transferred from the record by his secretary, nurse, or aide; or photostats can be made to expedite the reporting.

Form B-9 is divided into six groupings. The heading entitled "The Patient" requests merely identifying information which is the least one should have on his record for any patient. "The Accident" covers the date and time of the injury and an accurate description of the accident as described by the patient. An important question is that requesting when disability (inability to

Chairman, Committee on Occupational Health, Mississippi State Medical Association.

COMPENSATION FORMS / Purvis

Form B-9—Revised, 7-15-49

THE USE OF THIS FORM IS REQUIRED UNDER THE PROVISIONS OF THE MISSISSIPPI WORKMEN'S COMPENSATION LAW AND MUST BE FILED IMMEDIATELY FOLLOWING THE INITIAL DIAGNOSIS OF THE INJURY BY THE PHYSICIAN

STANDARD FORM FOR SURGEON'S REPORT

Approved by I. A. I. A. B. C.
MISS. WORKMEN'S COMPENSATION COMMISSION
P. O. BOX 651 — JACKSON, MISSISSIPPI

State's	File_____
Number	Carrier_____
For:	Employer_____
Carrier's File No. _____	
(The spaces above not to be filled in by Employer)	

The Patient

1. Name of Injured Person: _____ Age: _____ Sex: _____

2. Address: No. and St. _____ City or Town _____ State _____

3. Name and Address of Employer: _____

The Accident

4. Date of Accident _____ Hour _____ M. Date disability began _____

5. State in patient's own words where and how accident occurred: _____

The Injury

6. Give accurate description of nature and extent of injury and state your objective findings: _____

7. Will the injury result in (a) Permanent defect? _____ If so, what? _____
(b) Facial or head disfigurement? _____
(Permanent disability such as loss of whole or parts of fingers, facial or head disfigurement, etc., must be accurately marked on chart on reverse side of this report.)

8. Is accident above referred to the only cause of patient's condition? _____ If not, state contributing causes: _____

9. Is patient suffering from any disease of the heart, lungs, brain, kidneys, blood, vascular system or any other disabling condition not due to this accident? _____ Give particulars: _____

10. Has patient any physical impairment due to previous accident or disease? _____ Give particulars: _____

11. Has normal recovery been delayed for any reason? _____ Give particulars: _____

Treatment

12. Date of your first treatment: _____ Who engaged your services? _____

13. Describe treatment given by you: _____

14. Were X-Rays taken? _____ By whom? _____ When? _____
(NAME AND ADDRESS)

15. X-Ray diagnosis: _____

16. Was patient treated by anyone else? _____ By whom? _____ When? _____
(NAME AND ADDRESS)

17. If hospitalized, name and address of hospital: _____

18. Date of admission to hospital: _____ Date of discharge: _____

19. Is further treatment needed? _____ Far how long? _____

Disability

20. Patient ^{was} _{will be} able to resume regular work on: _____

21. Patient ^{was} _{will be} able to resume light work on: _____

22. If death ensued give date: _____

REMARKS (Give any information of value not included above): _____

I am a duly licensed physician in the State of Mississippi _____
Date of this report _____ (Signed) _____
This report must be signed personally by physician.

OFFICE SUPPLY CO.—JACKSON, MISS. N41

Figure 1. Workmen's Compensation Commission Form B-9, Revised.

MISSISSIPPI WORKMEN'S COMPENSATION COMMISSION

P. O. Box 651
JACKSON, MISS.

State's Number For:	File_____ Carrier:_____ Employer:_____
Carrier's File No._____ (Insert Commissions File Number)	

Final Medical Report

IMPORTANT—This Blank must be filled out and mailed to the COMPANY ON THE DAY treatment terminates.

Employer _____ Address _____
(City and State)

Name of Injured? _____ Date Injured? _____ 19__

First Aid Rendered by? _____ Subsequent Aid? _____

Total Number Office Visits	at \$_____	each _____	\$_____
Total Number Home Visits	at \$_____	each _____	\$_____
Total Number Hospital Visits	at \$_____	each _____	\$_____
Total Number X-Ray Pictures	at \$_____	each _____	\$_____
Total Number Operations	at \$_____	each _____	\$_____
Total Expense for Medical Aid			\$_____

Note any change in diagnosis or treatment from that given in "Standard Form For Surgeon's Report" Form B-9: _____

Was there any permanent injury or serious disfigurement? Yes_____, No_____. If so, describe fully _____

If hospital case, give date of admission _____ 19__ ; Date of Discharge _____ 19__

Patient stopped treatment without order of surgeon on Date _____

Patient (Will be — was) able to return to work on . Date _____

Patient discharged as cured on Date _____

Dated at _____ this _____ day of _____ 19__

Dr. _____

Street _____ City and _____

Address _____ State _____

Figure 2. Workmen's Compensation Commission Form B-27, Revised.

COMPENSATION FORMS / Purvis

work) began—this determines the time for beginning the patient's compensation. This question relates specifically to "accident" but has been broadened by judicial decree in the absence of an occupational disease statute to include disabilities declared compensable although not strictly defined as accidents.

"The Injury" deals with the medical diagnosis and findings. An estimate of whether or not permanent impairment will result should be given and described. This serves to supply the employer or carrier a basis upon which to set aside financial reserves to meet the obligation when a final impairment rating is given. Question 8 is designed to determine if there are other medical conditions or impairments which add to the injury and cause disability or add to it. Questions 9 and 10 are designed to bring out medical findings pertinent to the injury or disability which the physician would be expected to encounter during his normal assessment of the patient in the examination and treatment of the injury. It does not request exhaustive studies. For example, each of these may require only "not to my knowledge" as the answer if it applies. It seems that question 10 is actually redundant and is included under question 9. Question 11 seems applicable only if there are complications, treatment has been delayed by negligence on the part of the employer or employee, or "quackery" has been used.

For "Treatment" the questions are self-explanatory, but it seems that the questions relative to x-rays should have been listed under "The Injury" as they are diagnostic rather than therapeutic. Question 19 requires only an estimate and is requested because many patients may return

to work long before it is possible to discharge them from medical treatment and give an impairment rating.

Under "Disability," number 20 refers to period of temporary total impairment when the patient cannot perform any of his usual employment; number 21 refers to the period of temporary partial impairment when he can do some part of his usual job but either not all of the work or not full-time work. It seems obvious that the physician should know something of the normal job requirements for his patient in order to properly answer these questions. He also needs to remember that return to at least some gainful occupation is within itself frequently therapeutic.

"Remarks" rarely requires comment but on occasion may be used to clarify information above.

Form B-27 (Figure 2) requests an itemized statement from the physician. This may not always conform to the form supplied but should be detailed.

Change in diagnosis or treatment not noted previously in progress notes should be noted.

Permanent injury or disfigurement should be described and apportioned as medical impairment of a part or of the body as a whole. Whether this is a dominant part should be considered and any known pertinent facts such as preexisting impairments or special effects of the impairment should be noted. "Disability Rating" is a function for the Workmen's Compensation Commission; an "Impairment Rating" is one which the physician should supply. Guidelines for the physician to use in establishing impairment ratings are those listed in A.M.A. publications by the Committee on Medical Rating of Physical Impairment and various texts which are available. ★★★

421 South Stadium Circle (39216)

DARLING DELINQUENT

Says one member of the state medical association: "The most daring holdup I have ever witnessed was when our 15 year old daughter wore her first strapless evening dress to the high school prom."

Coronary Heart Disease:

Part IV

WILLIAM H. ROSENBLATT, M.D.

Jackson, Mississippi

THE OVERALL 21 DAY mortality rate in acute myocardial infarction ranges anywhere from 25 to 30 per cent, approximately over half of this mortality rate taking place in the first 48 to 72 hour period. Out of the 50 per cent mortality rate that does occur in the first 48 to 72 hour period, about one-half will die of serious arrhythmias.

There are a multitude of arrhythmias that develop during the course of acute myocardial infarction. Certain arrhythmias, unless corrected promptly, will result in death. Ninety per cent or more of all acute myocardial infarction patients, if monitored, will show evidence of some type of arrhythmia.

We ordinarily set the figure of more than six premature ventricular beats per minute as being indicative of a serious arrhythmia. If we were to take 100 healthy people at random with no symptoms of heart disease whatsoever and monitor them during a 24 hour period, the majority would show some type of irregularity in cardiac rhythm. This has been done with athletes and almost 100 per cent showed evidence of premature contractions. Therefore, when we say that 90 per cent of all patients with acute myocardial infarction develop some type of arrhythmia, we are really not saying too much—90 per cent is probably a low figure.

Some of these arrhythmias involving the supra-ventricular area, the atria, or the AV node, can become serious even though they may appear to be minor. For example, a normal person with frequent auricular premature contractions may or may not be asymptomatic, but another individual with acute myocardial infarction with runs of atrial premature beats constituting paroxysms of atrial tachycardia might be threatened with serious complications. A normal individual might tolerate frequent premature ventricular contrac-

tions without difficulty, while an acute myocardial infarction patient would be prone to develop ventricular tachycardia or ventricular fibrillation.

The major arrhythmias, including premature ventricular contractions and ventricular tachycardia, are those that actually decrease the efficiency of the heart and have to be treated promptly in order to prevent congestive heart failure or sudden death.

As indicated, the most dangerous arrhythmias are the ventricular ectopic arrhythmias, such as

Ninety per cent or more of all acute myocardial infarction patients, if monitored, will show evidence of some type of arrhythmia. Certain of the multitude of arrhythmias that may develop will result in death unless corrected promptly. The author discusses the management of the acute stage from the standpoint of arrhythmias.

ventricular tachycardia, ventricular fibrillation or ventricular standstill. In the past, before the days of continuous monitoring to detect arrhythmias, individuals who developed, for example, ventricular tachycardia or fibrillation were rarely promptly diagnosed and treatment was often delayed. We have all seen instances where individuals presented with ventricular tachycardia or fibrillation and survived with prompt treatment.

Other serious arrhythmias are, of course, sinoauricular arrest or SA block, delayed AV conduction, i.e., first degree AV block (where the PR interval is prolonged beyond the normal .20 seconds) or second degree AV block (where there are two atrial contractions for every ventricular beat) or complete A heart block (where the auricles are beating at their own rate and the ventricles at theirs, there being no relationship

Adapted from a postgraduate symposium conducted by the author at the University Medical Center, Jackson.

between the firing off of the impulses of the SA node and the ventricular contractions).

Figure 1 shows the normal conduction system of the heart. The SA node is located in the right atrium just about where the superior vena cava enters; this is the normal pacemaker of the heart. From here the impulses spread across the atria down to the AV node and then pass into the bundle of His which divides into the left bundle branch which courses along the interventricular septum then sends off fibers into the left ventricular muscle mass, the right bundle supplying the right ventricle. When the SA node fires off impulses, the atria contract and P waves are recorded on the electrocardiogram. The time from the beginning of the P wave to the onset of ventricular contraction or the QRS complex is called the PR interval. The PR interval represents the delay of the impulses across the AV node. One can readily appreciate that if there is a block in the AV node, the PR interval will be prolonged.

SEPTAL Q WAVE

At this point, let us discuss the septal Q wave. Normally after the AV node has been traversed by the impulses, the interventricular septum is depolarized from left to right. If there were an electrode in the V1 position at this time, there would

be an initial upright deflection or R wave because of the impulses coming toward that electrode. The right ventricle is then depolarized and adds to the positive charges of the initial R waves. When the impulses are going away from the V1 position, there is an initial downstroke or S wave (left ventricular depolarization). If we were to simultaneously record from the V6 position, we would

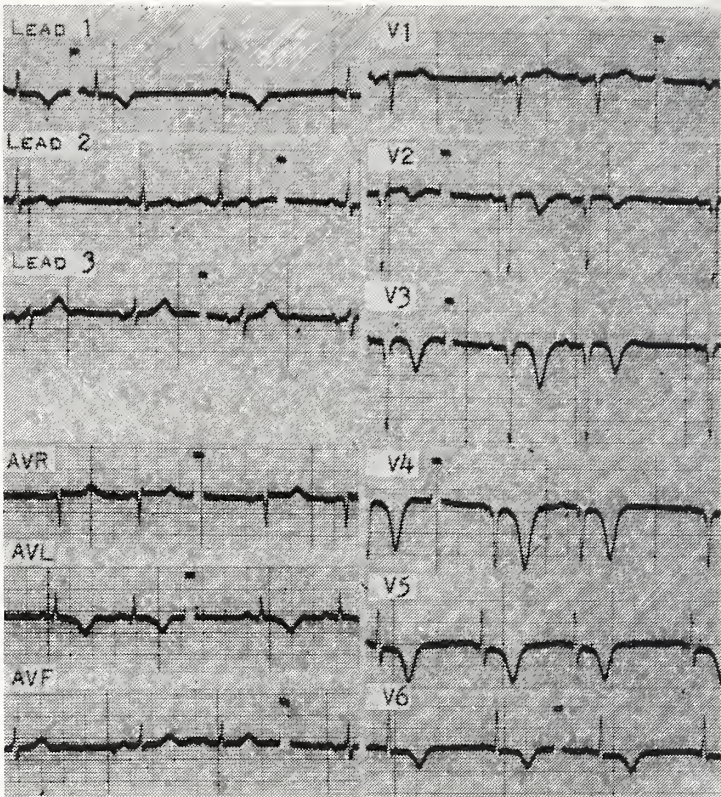


Figure 2

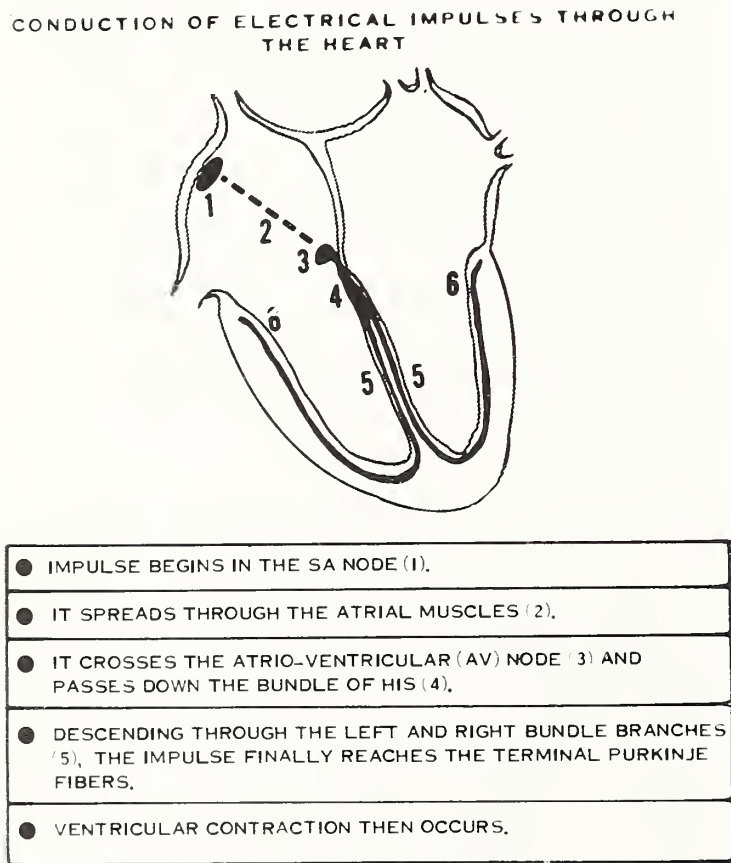


Figure 1

see the initial depolarization of the septum from left to right recorded as a small Q wave. This is a so-called septal Q wave and never measures 0.04 seconds or more.

Figure 2 shows atrial premature beats in the presence of an active antero-septal myocardial infarction. The beats occurs prematurely in the cardiac cycle, and the ensuing QRS complexes are not bizarre-shaped like ventricular premature beats, and there is not a full compensatory pause. Generally, atrial premature contractions have no serious significance unless they occur frequently in the course of acute myocardial infarction, when they could be forerunners of paroxysmal atrial tachycardia. This arrhythmia should then be treated with quinidine in the usual dosage.

EFFECTIVE QUINIDINE ACTION

In order to have effective quinidine action on the myocardium, the quinidine blood level has to be between four to six mg. per liter. It has been found that heavy people, 180 pounds or more, will not come close to having a blood level of four to six mg. per liter if they are given the usual dose of

three grains of quinidine every six hours. If the individual weighs under 125 pounds, three grains every six hours would probably be adequate; however, a priming dose of six grains should be given, regardless of body weight. If the body weight is over 180 pounds, the dose should be either 0.3 gm. or 0.4 gm. every six hours.

It has been found that individuals with elevated BUN and creatinine levels, borderline uremics, cannot tolerate quinidine in the usual dosages. Apparently the kidneys play a great part in the excretion of quinidine, and such patients build up tremendous blood levels, 10 to 12 mg. per liter, and go into quinidine intoxication, even with the usually accepted dosage. It is therefore wise to routinely get BUN and creatinine levels on all myocardial infarction patients. If these are elevated, the quinidine dosage must be watched carefully.

ATRIAL FIBRILLATION

In the case of myocardial infarction, the presence of atrial fibrillation is quite important for two reasons: (1) a rapid ventricular response could precipitate acute left heart failure and (2) there may be mural thrombi present, and emboli could be thrown off. Figure 3 demonstrates total irregularity of the heart rhythm; the RR intervals are

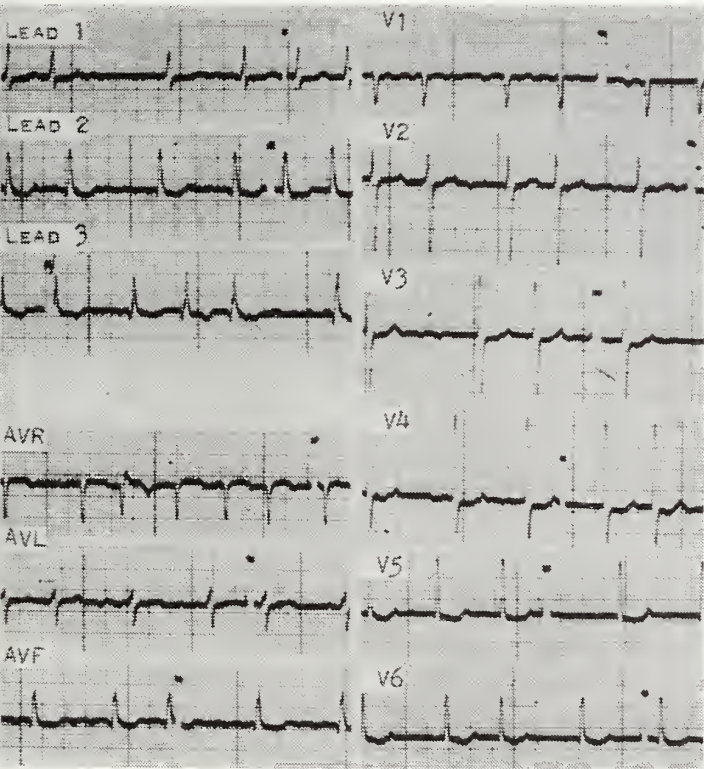


Figure 5

quite irregular with a ventricular rate which speeds up, slows down, and speeds up again. There are no P waves to be seen. The baseline is irregular. Clinically, if one were to listen over the cardiac apex and count the apical rate, there would be an

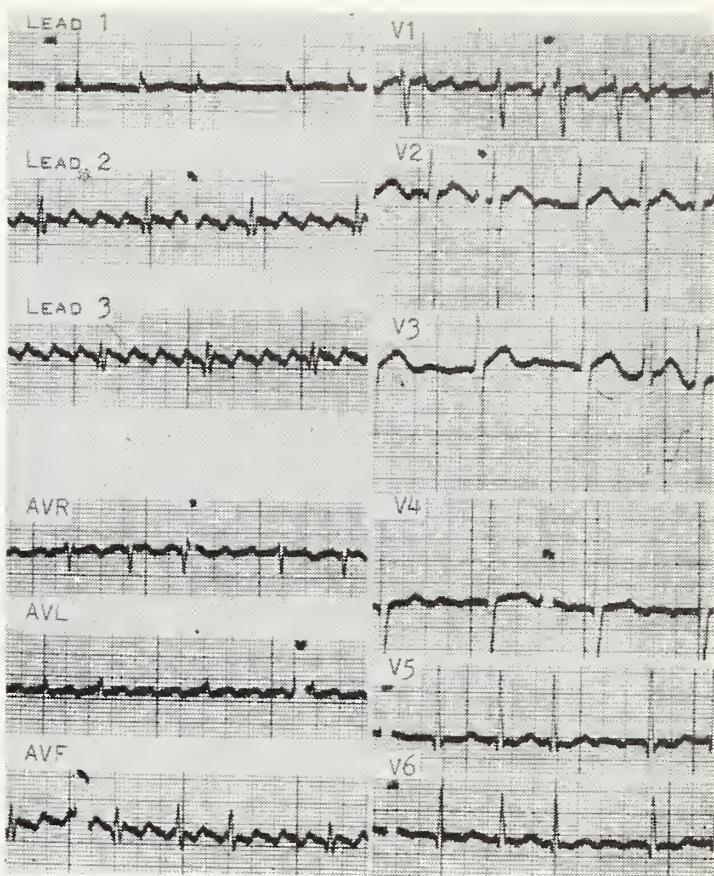


Figure 4

irregular rhythm, with a pulse deficit; this is typical atrial fibrillation.

Figure 4 demonstrates atrial flutter. The atrial rate in atrial flutter is usually in the neighborhood of 300 per minute; the ventricular rate, 150 per minute. In other words, there are two atrial contractions for every ventricular contraction (2:1 A.V. block). If there is a variation in the block across the AV node, as seen in this figure, one may find a 3:1 block or 4:1 block, switching back and forth. When examining such a patient, one cannot differentiate between atrial flutter and atrial fibrillation.

CONFIRMING ATRIAL FLUTTER

The only diagnostic test that can be reliably used to determine the presence of atrial flutter, therefore, is the electrocardiogram. Ordinarily a patient who has atrial flutter, untreated, will have a 2:1 block. With carotid sinus pressure in atrial flutter, the rate will be slowed and will rise again with release of the pressure. This suggests that the arrhythmia is atrial flutter and not atrial tachycardia. In atrial tachycardia, carotid sinus pressure will usually restore a normal sinus rhythm.

The treatment of choice of atrial flutter is digitalis which will increase the block across the AV node and slow the ventricular response. After this, there are two treatment choices. One can either withdraw the digitalis completely, and hope

that the individual will go into atrial fibrillation and then convert to a normal sinus mechanism, or he can be kept on a maintenance dose of digitalis and be treated later with quinidine in an effort to convert the rhythm to a normal sinus mechanism.

AV CONDUCTION DELAY

Figure 5 demonstrates delay in AV conduction or first degree AV heart block with prolongation of the PR interval to .28 seconds or beyond the usual .20 seconds, and marked ST elevation in leads 2, 3 and AVF. This is an acute posterior wall myocardial infarction with left ventricular enlargement. The right coronary artery supplies the AV node in roughly 88 per cent of cases. Therefore, in acute posterior wall myocardial infarction, one must always be on guard for just this sort of development. AV heart block, whether partial or complete, can result in cardiac arrest or ventricular standstill. What I would recommend in acute posterior wall myocardial infarction, even without AV heart block—one never knows when this is going to develop, due to inflammation about the AV node—would be to administer atropine sulfate intramuscularly in a moderate dose and hope that this will decrease vagal tone. If the block develops or persists in spite of atropine, steroids should be tried.

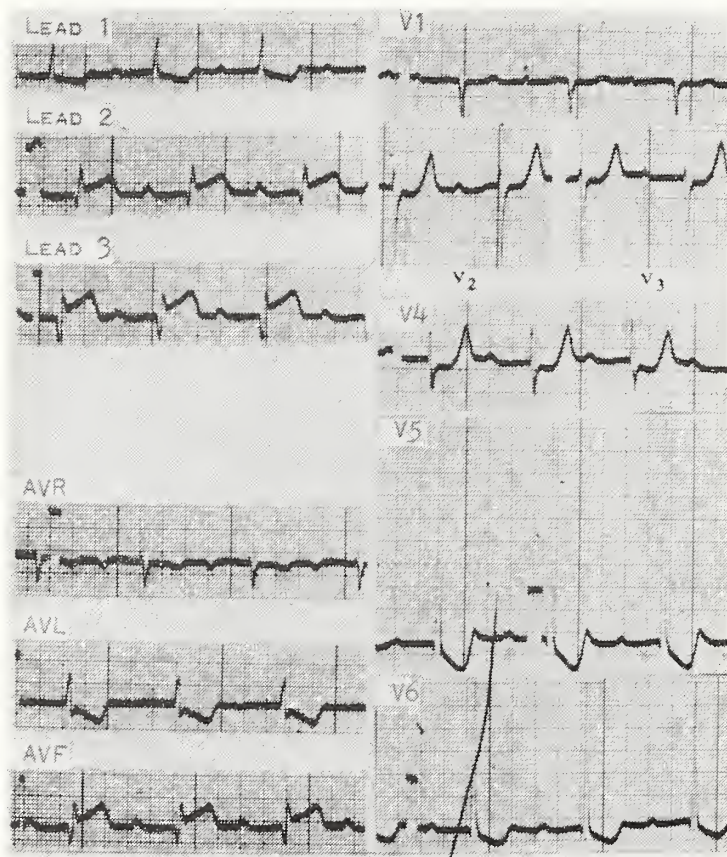


Figure 5

Figure 6 shows a complete AV heart block where you can see by the P waves that the auricles are contracting from their pacemaker in the SA node and go on their merry way without any relationship with the QRS complex. There is a slow ventricular rate, less than 40 per minute. The atrial rate is within normal range. When

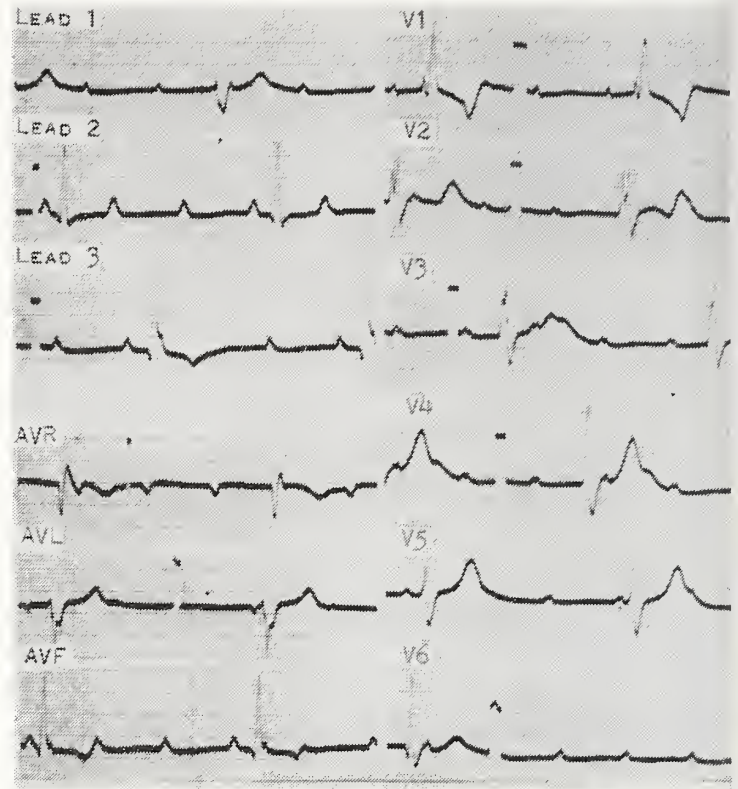


Figure 6

confronted with this in acute myocardial infarction, it is most serious because it could easily result in ventricular standstill or ventricular fibrillation. In such cases, the physician should try steroids with atropine, always being in readiness to insert a transvenous pacemaker. This, however, is not always possible in areas where the facilities are not available and one would have to resort to drugs, the best of which, of course, is Isuprel (4 mg. in 1000 cc. of 5 per cent glucose in water intravenously is usually the method of choice for increasing the ventricular rate). A transvenous pacemaker, however, is better in such a situation.

BIZARRE BEATS

Figure 7 demonstrates premature ventricular contractions. The premature beats are widened and bizarre. The T waves are usually in an opposite direction to the major deflection of the QRS. This arrhythmia in itself is not serious, except when found in acute myocardial infarction. With more than six premature ventricular contractions per minute, the individual should be placed on an antiarrhythmic drug, preferably

quinidine, the dosage being based on body weight in an effort to prevent ventricular tachycardia or ventricular fibrillation.

Figure 8 depicts the most dreaded arrhythmia found in acute myocardial infarction, ventricular tachycardia. The ventricular rate is rapid, usually over 120 per minute. The rate may get up to 200 per minute and is serious. The QRS complexes are widened and deformed. There are no P waves to be seen; they are buried in the QRS complexes. The rhythm looks regular, but if carefully measured, will show some irregularity.

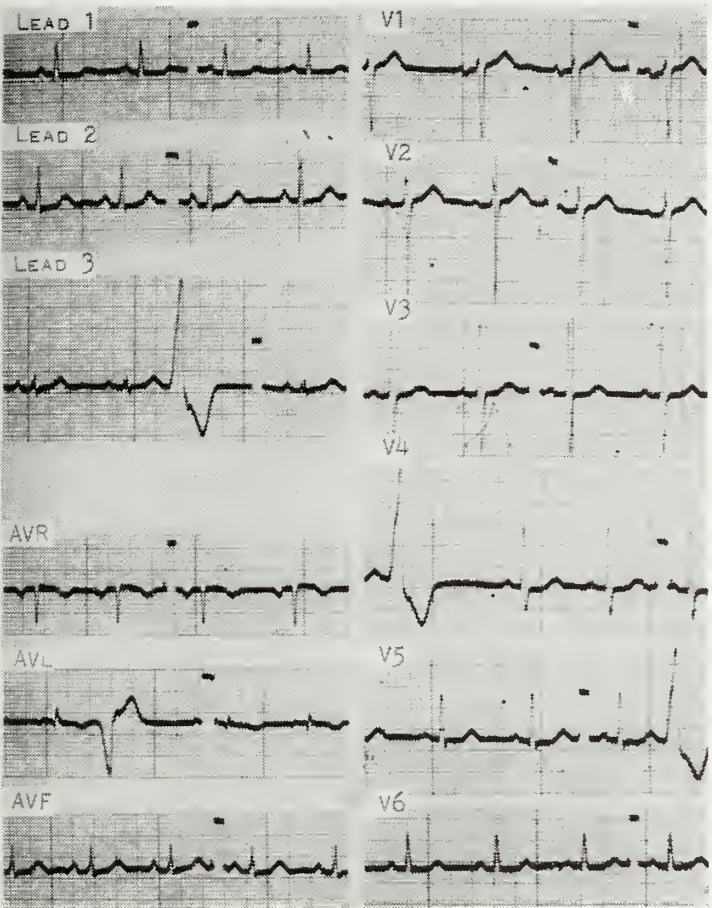


Figure 7

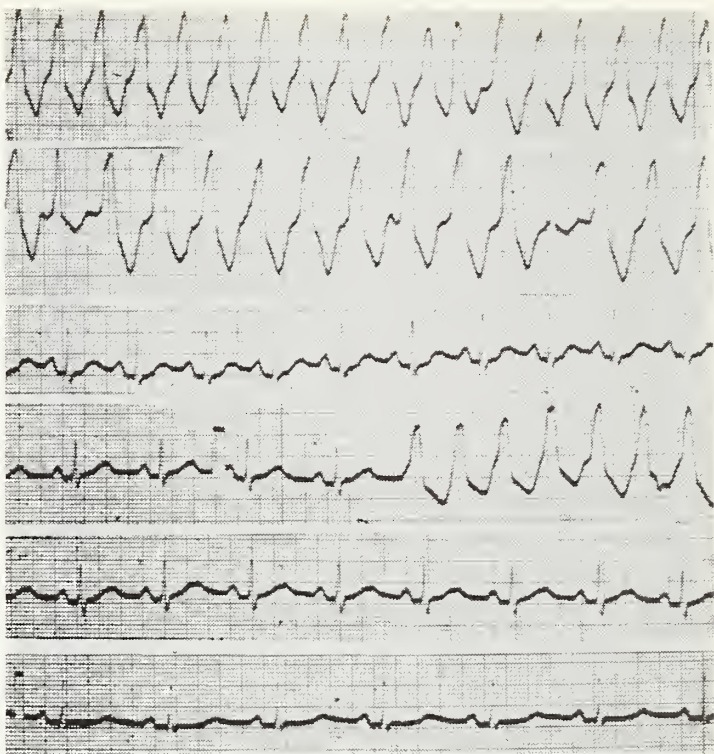


Figure 8

Though this condition may subside spontaneously, one should never assume that it will do so. In acute myocardial patients with this type of arrhythmia intermittently, who are not in shock, I would give four-tenths of a gram of quinidine as a priming dose, later administering 0.2 gm. to 0.4 gm. every six hours depending on body weight. Lidocaine (Xylocaine), 50 mgs. intravenously also is quite effective for this arrhythmia and can be repeated as needed. If these drugs are ineffective, the patient had better be DC countershocked, as soon as possible, and under Pentothal anesthesia, if possible. Initially, shocks should be started at 200 watt seconds, increasing the shocks to 400 watt seconds if necessary. ★★★

1151 North State St. (39201)

THE MELODY LINGERS ON

“If you don’t stop practicing the trumpet,” shouted a neighbor to the boy next door, “I’ll go crazy.”
“It’s too late,” observed the boy. “I stopped an hour ago.”

Radiologic Seminar LXIV: Pneumoperitoneum in the Newborn

HUGH C. McLEOD, JR., M.D.
Jackson, Mississippi

PNEUMOPERITONEUM IN THE NEWBORN as a result of spontaneous perforation of the intestinal tract is most commonly due to rupture of the stomach but occasionally follows rupture of the small bowel or colon.

Spontaneous perforation of the duodenum has been attributed almost uniformly to peptic ulcer. Perforation of the small bowel distal to the duodenum and perforation of the colon is usually due to obstruction secondary to volvulus, intussusception, meconium ileus, intestinal atresia, or imperforate anus. Small bowel perforation (other than duodenal) usually does not produce pneumoperitoneum.

Although peptic ulcer, obstruction and other known causes of gastric perforation do occur, perforation of the stomach is generally due to a congenital defect in the muscular layer of the gastric wall.

The clinical picture is usually that of a small baby who does well for a matter of hours or days after a normal delivery and then does not take feedings well, may vomit, and exhibits abdominal distension.

Radiographic findings are diagnostic and lead to early surgical intervention which may be life-saving. In the supine view the large single mass of air casts a smooth radiolucent image outlining the peritoneal cavity in an oval shape. The oval shadow produced by the air filled dome of the distended abdomen has been likened in appearance by Miller to a football. In the upper abdomen, there is a curvilinear streak density convex to

the right extending from the dome of the diaphragm to the under surface of the liver which represents the falciform ligament. Occasionally, the urachus can be identified as a similar streak in the lower abdomen. Confirmatory upright films may be obtained, but when present the "football" or "air dome" sign on the supine view is pathognomonic. It should be emphasized that this characteristic picture is not seen with small amounts of free air or when large amounts of fluid are present.

The following report and the above film reproductions are from a typical case: This six day old colored male product of an uncomplicated pregnancy entered University Hospital in 1958 with vomiting and abdominal distention which had begun the day of admission. His neonatal course prior to this had been uneventful. Clinical findings suggested intestinal obstruction but radiographs of the abdomen revealed massive free air in the peritoneal cavity outlining the falciform ligament and bowel walls. At surgery there was a perforation of the stomach secondary to congenital weakness of the gastric wall. Repair was effected but the patient failed to improve and expired on the third post-operative day. ★★★

2500 N. State St. (39216)

REFERENCES

1. Castleton, K. B., and Hatch, F. F.: Idiopathic Perforation of the Stomach in the Newborn, *Arch. Surg.*, 76:874-881, 1958.
2. Hamrick, L. C.: Gastric Perforation in the Newborn Infant, *J.A.M.A.* 171:411-414, 1959.
3. Herbut, P. A.: Congenital Defect in Musculature of Stomach with Rupture in Newborn Infant, *Arch. Path.* 36:91-94, 1943.
4. Linkner, L. M., and Benson, C. D.: Spontaneous Per-

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University Medical Center.

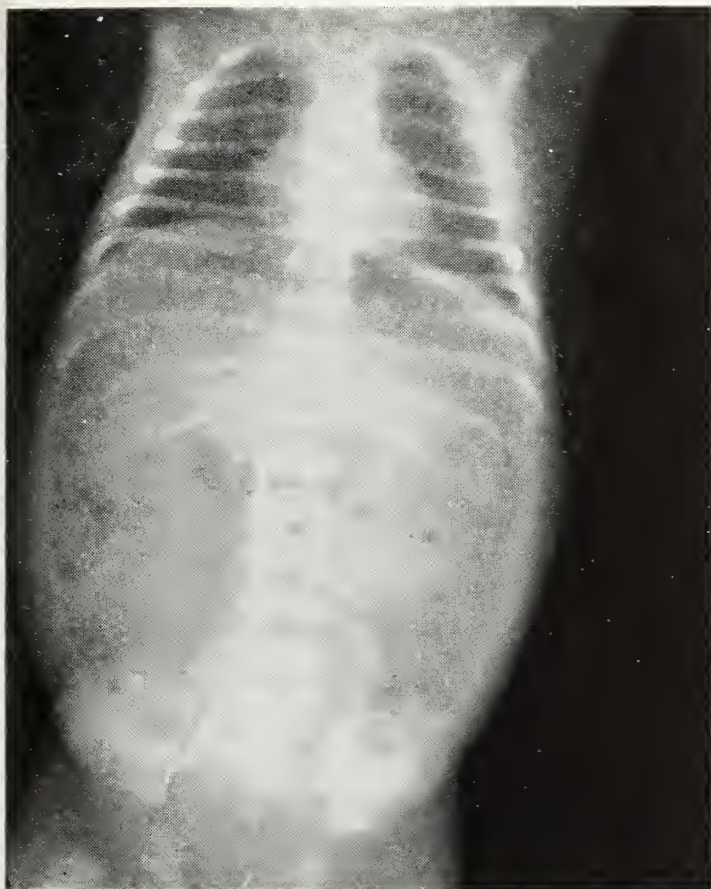


Fig. 1. Supine view. The peritoneal cavity is outlined by air with the streak of the falciform ligament easily seen.

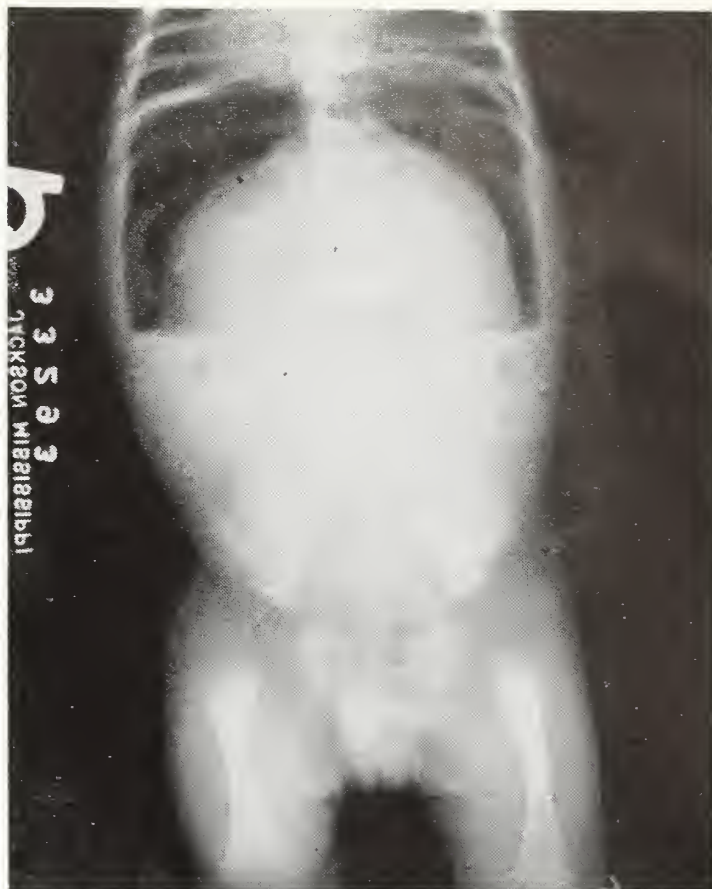


Fig. 2. Erect view. Confirms presence of free intra-peritoneal air, but "football" sign on supine view is pathognomonic.

- foration of the Stomach in the Newborn. Analysis of Thirteen Cases, *Ann. Surg.* 149:525-533, 1959.
5. Miller, R. E.: Perforated Viscus in Infants: A New

- Roentgen Sign, *Radiology* 74:65-67, 1960.
6. Ross, M.; Hill, P. S., and Haas, C. M.: Neonatal Rupture of Stomach, *J.A.M.A.* 146:1313-1314, 1951.

MARITAL MUDDLE

Said one intern to another: "I understand that you are having quite a disagreement with your girl."

"It's nothing much," responded the second. "She wants a big church wedding, and I want to break the engagement."

Clinicopathological Conference XC

Conducted by the Department of Pathology
University of Mississippi School of Medicine
Jackson, Mississippi

THIS 16-YEAR-OLD Negro female was admitted to the University Medical Center on Dec. 22, 1966, for the first time. She had been in good health until Dec. 10, 1966, when she developed a vague pain over the lower half of the left chest which was not related to respiration or cough. This pain was accompanied by a nonproductive cough and low grade fever. There was no hemoptysis. She saw her physician immediately, who treated her with oral antibiotics without any satisfactory response.

Lack of improvement prompted admission to a local hospital on Dec. 14, 1966, where x-rays and physical findings revealed left lower lobe pneumonia for which she was treated with Chloromycetin and penicillin. She did not respond to this treatment and continued to have spikes of temperature ranging to 103 degrees Fahrenheit daily.

At this time she was found to have a progressive increase in respiratory and heart rate and on Dec. 20, 1966, she was found in severe heart failure with signs of pulmonary edema, heart rate of 160/min and respiratory rate of 60/min and with a gallop rhythm. It was thought that she had an apical pan-systolic murmur and also a suggestion of a diastolic murmur at left parasternal border. At this time she did not have peripheral signs of aortic incompetence.

She was digitalized and treated for her heart failure and over several hours on the night of Dec. 20, 1966, she developed peripheral and cardiac signs of wide open aortic incompetence. She was started on parenteral nafcillin and kanamycin and also on Solu-Cortef.

On Dec. 22, her x-rays showed evidence of right middle lobe consolidation, which was not

present previously and on the same evening, she was transferred to the University Medical Center.

There was a history of migratory polyarthritis with swelling of ankle, knee, wrist and elbow in December 1964, which was diagnosed as rheumatic fever and treated. She had a tonsillectomy in January 1965.

Physical examination on admission revealed a temperature of 101 degrees Fahrenheit, pulse rate of 120/min and regular. There was a collapsing pulse, blood pressure of 140/20 mm. of mercury,

In CPC XC, Dr. Thomas M. Blake discusses the case of a 16-year-old Negro female who had been in good health until she developed a vague pain over the lower half of the left chest which was not related to respiration or cough. This pain was accompanied by a nonproductive cough and low grade fever. Dr. William M. Flowers, Jr. gives the radiological report, and Dr. Joel A. Brunson discusses the autopsy findings.

and respiratory rate of 32/min. The patient was a well-developed, well-nourished Negro female who was markedly dyspneic. Fundus was within normal limits. There was no clubbing. There was no swelling of any of the joints.

Examination of the cardiovascular system revealed an apex beat in the 6th left intercostal space in anterior axillary line which was forcible in nature. No thrills were felt. A Grade III/VI soft blowing pan-systolic murmur was heard in the mitral area, which was conducted to axilla. A soft blowing early diastolic murmur was heard

in the third left intercostal space and conducted along the left sternal border to the apex. Mitral first sound was normal in intensity. Second sound in pulmonary area was markedly accentuated.

All peripheral pulses were felt and femorals were bounding. On auscultation over femorals, pistol shot sounds were heard. Examination of the lungs revealed a dull note over the right inter and infrascapular, right infra-axillary, right mammary and infra-mammary region vocal fremitus and vocal resonances were increased over the same region.

On auscultation, coarse rales were heard over this region. Bronchial breathing was heard over the right inter and infrascapular region. There was an impaired note over the left base and coarse rales were heard in the same region. Examination of the abdomen revealed no enlargement of liver or spleen.

Pelvic examination was within normal limits. Initial laboratory data was hemoglobin 13.2 gm. per cent, hematocrit 32 per cent, WBC's 25,000 with neutrophils 19,000. Urine was within normal limits. ECG showed non-specific ST-T, x-ray showed cardiomegaly with bilateral congestive changes and superimposed pneumonitis on the right side.

COURSE OF TREATMENT

The patient was treated with high doses of parenteral Keflin, ampicillin, and streptomycin. She was also treated with oral digoxin and Prednisolone. Before starting therapy and subsequently several blood, urine and nasopharyngeal cultures were taken which were all negative. The patient did not improve on this regimen and so it was felt that she should be given in addition parenteral tetracycline and Solu-Cortef.

During this time her x-rays showed the same changes as described above. Her electrolytes were within normal limits. Her ESR was 55 mm/hr. Blood urea nitrogen was 7 mg. per cent, creatinine 1.0 mg. per cent. Febrile agglutinins were negative, also titre was 833 Todd units.

On Dec. 27, 1966, she had a cardiac arrest. She was resuscitated, a tracheostomy was done, and she was placed on a bird respirator. Several ECG's at this time showed cardiac arrhythmias, i.e. second degree A-V Block and atrial fibrillation.

After this episode, her urinalysis revealed 1 plus albumin, TNTC-RBC, 5-10 WBC's. She had a good diuresis throughout this time. There was a fall in her hemoglobin and hematocrit, lowest being 9.5 mg. per cent and 30 per cent. Several blood, urine, nasopharynx and tracheal aspirate cultures were sent at this time and none of these

revealed any growth. Her blood urea nitrogen rose steadily to 195 mg. per cent and creatinine to 9.4 mg. per cent. Her WBC showed leukocytosis to a range of 50,000 with 41,340 neutrophils. Her ear lobe histiocyte count was negative.

NO RESPONSE TO THERAPY

She never responded to therapy, and her fever spiked daily to 103 degrees Fahrenheit. On Jan. 1, 1967, her electrolytes were: blood urea nitrogen, 195 mg. per cent; chloride 92 mEq; CO₂ combining power 16 mEq; sodium 131 mEq; potassium 6.9 mEq; and creatinine 9.4 mg. per cent. She expired on Jan. 1, 1967.

Dr. Thomas M. Blake: "The patient is a 16-year-old Negro girl who had a 12 day history beginning, apparently suddenly, with the onset of vague left lower chest pain and a nonproductive cough with low grade fever. We don't know how sick she was, but she must have been pretty sick since she saw the doctor and was admitted to the hospital within a very few days after having failed to respond satisfactorily to treatment. The most likely system involved in a young woman with chest discomfort, cough, and fever in December is the respiratory tract. Apparently her doctor felt so too.

"He made a diagnosis of pneumonia and treated her with antibiotics without satisfactory results. There is no basis at this point for speculation as to the etiology of the pneumonia besides the likelihood that it was bacterial in origin. We can't be sure the chest pain was not due to heart disease, pericardial disease, pleural disease, chest wall disease, diffuse disease, or even abdominal disease. We should like to know whether she had had any jaundice or whether there were any other findings, but we don't know. (This is an example of describing a more or less clearly defined set of changes without saying in what setting they existed.)

PRESUMPTIVE DIAGNOSIS

"She was admitted to the local hospital with a presumptive diagnosis of pneumonia. We have the x-ray for review today. Physical findings were interpreted as confirming the diagnosis of left lower lobe pneumonia without any discussion as to what the etiology might have been. Her temperature spiked, suggesting an acute infection but not proving one. I am sure they thought she had a bacterial infection. After six days in the hospital, she apparently was getting worse, and I suspect that we ought to think of her disease as being due to undetermined cause.

"Apparently all of a sudden she developed heart

failure with pulmonary edema, tachycardia at a rate of 160, and a gallop. Here, without any discussion of anything specific or leading up to it, we have a diagnosis of acute left-sided heart failure in a 16-year-old girl. By itself this suggests relatively few diagnoses, and the presence of an acute febrile illness narrows the field even more. We don't know whether she had any right-sided failure, but we have no specific reason to believe she did, and so we think in terms of left-sided heart failure.

"Now we can discuss specific etiologic diagnoses. One is acute rheumatic fever and another, of course, is a bacterial infection. We have to think of a bacterial infection because there is a rapidly progressive febrile illness with heart failure and, it turns out later, she has a history of heart disease in the past. This is the combination of circumstances which makes one think of bacterial endocarditis, but there is nothing specific to support it at this point.

ANTIBIOTICS INEFFECTIVE

"The fact that the antibiotics had no effect is against the diagnosis, but, of course, she could have had bacterial endocarditis and the organism could have been suppressed by antibacterial therapy before the blood cultures were made. Acute rheumatic fever could do the whole thing, including fever and pneumonia. It is unlikely that the pneumonia was really congestive heart failure, and we will have some observations about this from Dr. Flowers later when we talk about the chest film, but we don't have the description of pneumonia very clear yet.

"We are not sure about this pneumonia. Congestive heart failure and pulmonary embolism are sometimes mistakenly called pneumonia. The information given would not make us think of these, but they have to be considered in the differential diagnosis.

"Given a heart rate of 160 in an adult sick in the hospital, you would be right almost always to assume that the pacemaker was ectopic, and in a young person, this would most likely be atrial tachycardia, but given the rest of the circumstances in which the rate of 160 exists, I think it is much more likely a sinus response to need for increased cardiac output, a compensatory mechanism in reaction to heart failure rather than a primary ectopic focus. A normal healthy young adult can expect to be able to push his heart rate up to something like nearly 200 with maximal exercise.

"The question of interpretation of a gallop here is one which we could speculate about, but not very usefully with no more clinical information. A gallop, implying a soft extra sound in diastole, is characteristic of failure of the myocardium either impending or actual. This patient was in heart failure and so this doesn't add a great deal. The recognition of a gallop at the rate of 160 would be difficult, and we certainly can't complain about somebody's failure to call it an atrial gallop or a ventricular gallop, an accentuation of the 4th heart sound or of the 3rd heart sound. I don't think the gallop is important to us here in this case.

NATURE OF MURMURS

"Now the murmurs are described for the 1st time. They suggest AV and semi-lunar valve regurgitation and their specific setting and circumstances imply that she had mitral and aortic regurgitation. I believe mitral regurgitation is described pretty clearly as having been present before the murmur of aortic regurgitation became apparent, and this is important in our subsequent discussion. We are going to proceed with the working diagnosis of mitral and aortic regurgitation.

"Now, of course, aortic regurgitation may be due to various causes—perforation of a sinus of Valsalva into the right atrium or the left ventricle, eversion of a cusp, destruction of cusps by infection, or rheumatic fever, but I believe we are safe in saying that she does have aortic regurgitation. I have talked to the sophomores recently about the difference between 'a history of no murmur' and 'no history of a murmur'; there was no history of a murmur in this case, but we don't know whether she had been examined for one before.

"Bacterial endocarditis could produce both aortic and mitral regurgitation, but mitral regurgitation in a 16-year-old girl with a history of migratory polyarthritis two years earlier and a tonsillectomy one year earlier is due to rheumatic fever until proved otherwise, and since we can't prove otherwise we are going to assume that at least the mitral lesion was a consequence of rheumatic fever.

RHEUMATIC FEVER

"Acute rheumatic fever could produce both lesions—acute aortic regurgitation and mitral regurgitation in a febrile setting with pulmonary disease and with the course indicated in this patient. This is a possibility that must be recognized but we are never told enough about whether she had

other evidence of rheumatic illness at the time; joints, skin, subcutaneous nodules, to feel strongly about this.

"The differential then here still involves rheumatic fever and bacterial endocarditis or both, but my tendency is to lean towards acute rheumatic fever. If this patient has bacterial endocarditis, its origin is not clear unless she did indeed have some sort of pneumonia to begin with, and it is impressive that no organisms were demonstrated despite efforts to do so.

"She was digitalized. I suppose she got better, but it doesn't say so. Next she developed signs of 'wide open' aortic regurgitation. Apparently this lesion developed over a period of at least no more than days, but I don't think there is enough information here to tell exactly how abrupt it was. She was started on nafcillin. Other antibiotics were given in an apparent effort to cover any possibility of bacterial infection that might be a part of her problem. At the same time she was given hydrocortisone because of the possibility that she had acute rheumatic carditis.

"This is standard and as effective as any approach to this problem but the anti-inflammatory response to this drug, desirable in the management of acute rheumatic fever, would not be desirable in a patient with bacterial infection and apparently the doctors on the ward were between the horns of this dilemma and simply treated both of the reasonable possibilities as vigorously as they could. She was very sick indeed, and it was suspected that there was a penicillin resistant staphylococcus or some organism. Kanamycin is a broad spectrum antibiotic derived from a strain of *Streptomyces* which is effective against staphylococci, and presumably the penicillin and the chloromycetin were continued. The doses were called high.

SITE OF LESION

"An x-ray was said to have shown a right middle lobe opacity not present before. There is no comment about the physical findings or what happened to the left lower lobe lesion. Now we are faced with either resolution of one lesion and the appearance of another, bringing back the question of pulmonary embolism, or a misprint or a misinterpretation or a shifting lesion of some other sort without really any basis for an opinion as what the case is. I think we have to assume that the left lower lobe lesion has gone away and that she now has a right middle lobe lesion.

"She arrived here at UMC a young woman severely and progressively ill with fever and aortic regurgitation. Differential diagnoses were

acute rheumatic fever and bacterial endocarditis. She had the murmurs of both aortic and mitral regurgitation and some left ventricular failure with an increase in the intensity of the second sound at the left base. I interpret this as meaning an increase in the second component of the second sound at the left base implying pulmonary hypertension as result of left-sided failure. She also had signs of consolidation of the right middle and the lower lobes and something at the left lower lobe which may have been pleural fluid. There was no hepatomegaly or splenomegaly, or right-sided failure. The absence of splenomegaly continues to confuse the question, or at least fails to support the diagnosis of bacterial endocarditis.

LABORATORY FINDINGS

"Laboratory studies showed leukocytosis and neutrophilia with surprisingly little anemia; in fact, no anemia. Her urine was within normal limits. The EKG does not help us. It shows abnormalities which are nonspecific but suggest digitalis effect and which, if one had to choose a ventricle, would point to the left ventricle just as would be expected. I would like to know now what the x-rays show. Dr. Flowers, if you would comment on those."

Dr. William M. Flowers, Jr.: "We have a film made in 1964 which shows an increase in the size of the heart as compared to normal. Now as we compare subsequent films, notice that we are comparing different techniques, different patient's positions, and different degrees of inspiration. This makes some difference in the appearance of the chest and accounts for some difficulty with interpretation. However, I think there is no doubt that this patient had progressive radiographic evidence of disease on the film taken shortly before death.

"The series shows that by Dec. 17 the patient was apparently unable to stand up. By Dec. 20 there is definite progression, and we see an air bronchogram effect in the lungs. The air bronchogram sign has the appearance of branching segmental bronchi on a plain film. We see them as black streaks on a white background. This is an indication that the pulmonary parenchyma is denser than normal. The most frequent reason for this is a pneumonitis.

"Other films show progressive changes, to the point of solid opacification. We still see our air bronchograms. The left hemidiaphragm is completely obscured. I do not see any evidence of selective left atrial involvement. I do believe the patient has left ventricular enlargement. I think that this heart probably got only slightly larger as we go along. But the changes in the lungs were progressive."

Physician: "The first film was in 1964, two years prior to this admission, and did you say the heart was enlarged at that time?"

Dr. Flowers: "Yes, sir. Her heart was enlarged in 1964."

Dr. Blake: "The interpretation, then, supports the view that she had mitral valve disease beforehand as implied in the early part of the protocol. Can you make any comment about the subject of rheumatic pneumonitis?"

Dr. Flowers: "I don't think that I can, Dr. Blake. I don't see left atrial enlargement, and I don't see typical basilar changes on lymphatic spaces. I think the lung changes are parenchymal changes. Further than that, they are nonspecific."

Physician: "I meant the concept of infiltrative changes in the lungs themselves. The interstitial pneumonitis that has been described as part of rheumatic fever."

Dr. Flowers: "Well, this patient has unequivocal parenchymal disease. The etiology has not been established by the radiographs."

Dr. Blake: "That is as good as I can ask for. All right, the differential diagnosis remains the same. I did not know about the 1964 film, but it helps support the idea that she had rheumatic fever in the past and mitral regurgitation. After she got here, she was given several additional antibiotics. I don't know why streptomycin was added, perhaps just to broaden the spectrum. I doubt that anybody thought that she had tuberculosis, though tuberculosis must always be considered, especially at a CPC.

STERILE BLOOD CULTURES

"Numerous blood cultures were found to be sterile, but she had been on antibiotics before she got here. The chest x-ray didn't change and neither did the EKG's. She must have stayed about the critical same then for five days during which time the only additional positive laboratory findings noted were the increase in sed rate to 55, a nonspecific reaction, the ASO titer of 833 was high, the upper limits of normal being something on the order of 200 Todd units, implying a recent infection with a group A hemolytic streptococcus. Her renal function was apparently normal.

"Then she had a cardiac arrest—medical jargon for sudden death—on the fifth hospital day and following resuscitation she was kept alive for some five or six days and during this time she got progressively worse with hematuria, renal failure, and anemia. Cultures again were not diagnostic, but I doubt that they showed 'no growth.'

They probably showed no diagnostic organisms.

"The picture was dominated during the last few days by renal failure. I suspect that anemia had been progressive during her illness, but we are not told specifically—either this or she suddenly lost blood with the resuscitation. I don't really have a satisfactory explanation for her anemia. What happened to her blood pressure? It must have been all right because she put out urine but her BUN rose precipitously.

RENAL INVOLVEMENT

"This terminal renal episode could have reflected involvement of the kidney by rheumatic fever, I suppose, but I can't quite imagine this and can find no description of it. She could have had emboli from her heart if she had bacterial endocarditis, but lack of evidence of embolic disease of the kidneys has been a factor against diagnosis of bacterial endocarditis, and there is no other evidence of embolism. It could have been from trauma during resuscitation.

"I attribute the renal failure in a broad sense to trauma and the period of diminution of cardiac output associated with her cardiac arrest. The last few EKG's looked a little different from those that were made on admission with all sorts of changes of mechanism and of I.V. and A.V. conduction in the period immediately after resuscitation, but the EKG's don't really help.

"This patient's problem can be summarized briefly. She had a rapidly progressive febrile disease with aortic regurgitation, mitral regurgitation, congestive heart failure, cardiac arrest, and rapidly progressive renal failure with death five days after resuscitation. To repeat for the sophomores' benefit, a diagnosis must indicate three things: topography, manifestations, and etiology and may be expressed in various ways. This girl had heart disease, specifically mitral and aortic valve disease, as her basic lesion, she had renal involvement, and presumably she had pneumonitis. The manifestations were cardiac decompensation and a febrile illness. The big question which seems still open is the one of etiology and the mechanisms by which it brought about her disease.

"The first etiology to be considered is rheumatic fever—acute rheumatic fever. Jones' criteria have been satisfied. She had at least one major manifestation, carditis by almost any definition, and at least three minor ones, fever, leukocytosis and increased sed rate, and the ASO titer provided evidence of a recent streptococcal infection. Acute rheumatic fever can follow this clinical course and as many as about 4 per cent die in the initial attack. If this were acute rheumatic fever, she would

almost certainly have had joint involvement, but we don't know whether she did or not.

"I would be surprised if she did not have some pericardial involvement, though there is no specific suggestion that she did have. Rheumatic pneumonitis is a concept and something that I haven't run across very often. It consists of parenchymal infiltration and thickening in the interalveolar septa and is characterized by a relentless, rapid course and by tachypnea. She had a respiratory rate of 60 which fits well with this but on the other hand she had pulmonary edema and extensive disease in her lungs and tachypnea could result from these.

"Bacterial endocarditis will have to be considered. From the point of view of the clinicians, this would have to be treated promptly, and I agree with the approach taken in the management of this patient; to treat her for both likely possibilities, rheumatic fever and bacterial endocarditis. We used to talk about subacute bacterial endocarditis, but this picture has changed so that I am glad to see that second year students now refer to 'bacterial endocarditis.' What counts is not how long it takes the patient to die, but what the organism is and this is the basic difference among the various types of bacterial endocarditis. Bacterial endocarditis could produce this whole clinical picture but not in quite such a clear course of events as rheumatic fever.

MITRAL REGURGITATION

"I believe mitral regurgitation preceded aortic regurgitation and had been present for some time as suggested by the chest film. This wouldn't be bacterial endocarditis. Bacterial endocarditis most likely would complicate a pre-existent rheumatic valvular lesion. There is no statement that she had or didn't have petechiae, clubbing, Roth spots, splinter hemorrhages, hematuria, embolism, or splenomegaly, and there were no positive blood cultures. Without prior treatment the blood cultures will be positive in something like 90 per cent of patients who have bacterial endocarditis and about 90 per cent of those will be found in the first four blood cultures. Failure to produce positive blood cultures is not terribly strong evidence against the diagnosis, but it doesn't support it. Prior treatment in this case may have confused the issue.

"If she had had a hemolytic streptococcal endocarditis, this could have given rise to the ASO titer, but I believe a hemolytic streptococcus would have responded to all of this treatment. She could have had a resistant staphylococcus or some sort of fungus that wasn't looked for, but

the course was so relentless and fast that if it was infectious, it was an awfully virulent organism and it is hard to imagine its not being found. The absence of histiocytes fails to support the diagnosis of bacterial endocarditis. I looked the histiocyte test up and found it dates back to something like 1907, but it is one with which I was not familiar. It is not specific.

FINAL DIAGNOSIS

"It is possible that she did have rheumatic mitral valve disease, that she did have bacterial endocarditis, that the bacterial infection was controlled by the treatment she got before she came here but not until after it had damaged the aortic valve, and that her subsequent course was based on destruction of her aortic valve so she died of the hemodynamic consequences of her bacteriologically cured disease. We don't know about her temperature. She had fever when she came in and she didn't improve so I suppose she continued to have spikes in temperature despite her treatment with antibacterials.

"Other possible etiologies include tuberculosis, syphilis, neoplasia, and diffuse vascular disease, but these seem unlikely.

"Final diagnosis is acute febrile illness of uncertain cause, manifested by mitral and aortic regurgitation with cardiac decompensation and death. The etiology was rheumatic fever, most likely. Bacterial endocarditis is a second possibility and the combination of both of them is a third. Working on the assumption that it is always well to make a single diagnosis to explain everything, I would say she had rheumatic fever, but I don't feel strongly that she didn't also have bacterial endocarditis, either before she got here or as a terminal result failing to respond to treatment. She had pneumonitis due to undetermined cause, and I think that the renal failure was a consequence of her cardiac arrest and subsequent hemodynamic insufficiency.

ORGANISM IDENTITY

"I don't have a basis for speculation as to what the organism would be. This is one of the things that leads me to the interpretation of the whole thing as being rheumatic. It could be all of these other things but without any specific reason to point to anything despite the efforts that have been put forth to find an organism, I am led to think in terms of rheumatic fever. We will ask Dr. Brunson to tell us what the answer is."

Dr. Joel G. Brunson: "This patient did have rheumatic fever—rheumatic carditis at any rate.

At autopsy, the heart was remarkably enlarged for a patient of this age. It was close to 500 gm. in weight, which is about two and one-half times what it should be. The disconcerting thing, I guess, was that the heart was flabby and obviously was the seat of inflammation, but it did not grossly present any diagnostic lesions of acute rheumatic valvulitis. The aortic valve was not particularly remarkable and did not show any vegetations.

"The mitral valve, on the other hand, was thickened and the leaflets were retracted. The chordae tendineae were shortened, and it appeared grossly that this valve certainly would have been incompetent. So I think there is good evidence for mitral insufficiency. Microscopically, the mitral valve showed the typical inflammation of rheumatic fever at its base. There was some hemorrhage and congestion and a marked degree of cellularity. Most of the latter were mononuclear cells, particularly lymphocytes, plasma cells and a few larger cells that resembled the Anitschkow cell.

SUBENDOCARDIAL PROTRUSIONS

"On the mitral valve there were some little protrusions noted. These were subendocardial and covered by endocardium. The center of these nodules was composed of a mass of hyaline, homogenous material with an admixture of the same type of inflammatory response deep in the substance of the valve. So there is evidence of an acute, or least recurrent, mitral valvulitis of pneumatic type. With regard to the myocardium, there were lesions which fit those of rheumatic myocarditis. There was an admixture of inflammatory cells in the background of the lesions. Looking at these aggregates of cells, most of which lay near or about the intramural coronary arteries, one could make a somewhat more specific diagnosis.

"The characteristic cells that make up the Aschoff body, the so-called caterpillar cells with the longitudinal nuclear bar of chromatin, were present, together with occasional binucleate giant cells, plasma cells, and lymphocytes. A mass of nondescript hyaline material, fibrinoid material lay in and about the lesion, and these features represent those of a fairly early Anitschkow body. In other lesions, perhaps more fully developed, there was hemorrhage and fibrinoid material, together with a more florid cellular reaction. These we consider to be specific for the diagnosis of

rheumatic myocarditis. They are not seen, in my experience, in bacterial endocarditis.

"Looking at other sections from the heart showed that the ring of the aortic valve was also involved. There was rather intense inflammatory reaction in the base of that valve extending into the aorta and associated with lesions of the adventitial vessels of the aorta which resemble the Aschoff bodies of the myocardium. I think that the extent of inflammation in the myocardium, and the extent of change in the ring of the aortic valve, and the extent of change in the vasa vasorum of the aorta, may be sufficient to explain the development of aortic insufficiency, brought about by stretching and dilatation of the ring of the valve.

CARDIAC INCOMPETENCE

"Also, the marked myocarditis with obvious cardiac incompetence may have added to this phenomenon. Indeed, it is possible that the adventitial lesions may have been associated with dilatation of the aorta itself. There was no evidence of pericarditis and there was no excess fluid in the pericardial sac. There were no congenital defects in the heart.

"The lungs were quite heavy, but there was no accumulation of fluid in the pleural cavities. They grossly appeared to have a fleshy, meaty appearance, and numerous hemorrhages were scattered over the pleural surface. Some areas of the lung were much darker and in other areas this appeared to be frankly hemorrhagic. Microscopically, it appeared that there had been successive episodes of pulmonary hemorrhage. I have about given up trying to separate rheumatic pneumonia from what is termed uremic pneumonia, and I was not aware of the fact that this patient had pulmonary changes prior to development of uremia, but I don't think that I could separate these two entities at all either grossly or microscopically.

HYALINE MEMBRANE CHANGE

"The characteristic change is the hyaline membrane which lines the alveolar spaces, together with varied numbers of inflammatory cells. It is not associated with the membranes along the alveolar ducts, and in this respect differs from hyaline membrane syndrome of newborns. In this patient there were large areas of the lung in which fibrin had accumulated, and this change had apparently been going on over a fairly long period of time, so that some of this material was organized and the alveoli were changed into really solid masses of connective tissue.

"I think that the development of this disease in different portions of the lung at different times may explain the radiographic appearance. In addition to these there were recent changes, characterized by massive hemorrhage in association with which there was fibrin over the pleural surface of the lung.

"We may summarize this case by saying that it is probably recurrent post streptococcal cardiac disease, that there are fresh, microscopic vegetations on the mitral valve and that there is evidence of old mitral disease. There is involvement of the aortic valve ring, most likely associated with dilatation and stretching, and there are lesions that involve the vasa vasorum of the aorta, these two components probably explaining the aortic insufficiency. There is what is spoken of as rheumatic pneumonia and pulmonary hemorrhage. As far as the kidneys are concerned, I would relate the changes that I see to the period of anoxia following her cardiac arrest and resuscitation. These are manifest structurally by hydropic changes in the renal tubules and by what appears to be an accumulation of fat, both of these being evidence of renal anoxia or hypoxia.

"It may be appropriate at this time to review some of our concepts of this disease. I believe that we are on a reasonably safe ground to say that this case represents a streptococcal infection leading to rheumatic fever. The epidemiologic relation between group A streptococcal infection and rheumatic fever has been established sufficiently firmly for us to conclude that it does not occur without antecedent infection with this agent. As far as who gets the disease, or the frequency of its occurrence, this is not known with any degree of certainty.

DEVELOPMENTAL FACTORS

"There appear to be at least two factors which maybe influence the development of the disease: (1) certain features of antecedent infection and (2) the host's previous experience with rheumatic fever. As far as the antecedent infection is concerned, one can say, I think, that the carrier stage or the acquisition of a group A streptococcal infection not associated with an immune response is not associated with either primary or secondary rheumatic fever; that is, the frequency of attack rate of rheumatic fever appears to be related to the magnitude of the immune response. Apparently, it is also related to the duration of the convalescent carrier stage; so that a high immune response and a prolonged convalescent time increase the susceptibility to rheumatic fever. Both of these occur with the greatest frequency in epidemic conditions.

"It is possible also that a milder streptococcal infection may be associated with a low overall attack rate and low incidence of acute rheumatic fever. As far as host factors are concerned, I believe that most people rule out any genetic influence since the concordance of this disease in twins is no greater than concordance in diseases such as polio or tuberculosis. As far as secondary attacks are concerned, one has to bear in mind the presence or absence of rheumatic heart disease at the time the disease makes itself known, the duration of time from the last rheumatic attack and the number of times that a particular patient has had this disease.

PROGNOSIS UNCERTAIN

"It all boils down to the fact that we are still unable to make any safe prediction as to what influences the streptococcus or what influences the host to develop this disease, that is, with any great degree of certainty.

"The streptococcus is, as you know, a complicated organism. There are at least three different classes of serologically identifiable proteins which comprise or at least reside within the cell wall surface. Of these the 'M' proteins appear to be the most significant in regard to virulence of the organism and in producing type specificity. One can remove the protein by digestion of the cell wall and this leaves behind a group specific carbohydrate and a substance known as a mucopeptide. One can separate these by simply dissolving the carbohydrate and leaving the skeletal framework of the mucopeptide, and it is this material which apparently forms the rigid part of the streptococcal cell wall.

"The 'M' protein which I mentioned is probably the most important in virulence. Its role is not clearly defined in this disease, but it apparently at least has one effect; which is an antiphagocytic one. In addition to the 'M' protein, it has been shown recently that the streptococcal wall also contains another unidentified antigenic component which is cross reactive with the antigens in myocardium and the smooth muscle cells of arteries and arterioles. This component has protein properties. It is related to or at least may be found with the 'M' protein, but it is thought probably not to be identical. At any rate, measurement of 'M' protein antibodies may thus include antibodies to this component, and present evidence suggests that the higher titer of these antibodies, the more severe the disease process is apt to be.

"The other component of the streptococcal wall, the carbohydrate fraction, has been shown to produce in rabbits a remittent and intermittent local lesion, a dermal one, characterized by

necrosis, fibrinoid deposition, and by a granulomatous appearance. It is thought that this is not a hypersensitive reaction but is probably a direct toxic effect of this material on connective tissue. It is of interest that the lesions may recur as long as 80 days after a single injection of this material, suggesting that it may persist in the tissue for at least that long in an active form.

"This active portion appears to be identical to or at least associated with the specific polysaccharide. Other people have shown that there is bound gamma globulin in cardiac muscle fibers and vessel walls lying in association with the hyaline material which comprises the Aschoff body, and that in the serum of patients with acute rheumatic fever there are multiple antibodies of both 7S and 19S classes, suggesting that the bound gamma globulin is derived from autoantibodies or from some peculiarity in which the 'M' protein or component of 'M' protein attaches itself to sarcolemma. In association with that there possibly occurs the cellular destructive, or connective tissue

destructive, action of polysaccharide to bring about the characteristic lesions of acute rheumatic carditis.

"One would have to cast some doubt on auto-antibody theory, I think, because it has been shown that almost any nonspecific injury to the myocardium, such as myocardial infarction or other type of ischemic cardiac disease, is often followed by the appearance of antibodies to cardiac muscle in that patient's serum. So, although a good deal of information has been accumulated about this disease there are still many unanswered questions with regard to the exact pathway by which streptococcus brings about this change in not only the heart but in other vessels. It would seem to me that we might look forward to the day when we should measure antibodies to 'M' protein, in which case I believe that one would be on safer grounds in prognosticating a patient's outcome. Dr. Blake, have you any final comments?"

Dr. Blake: "Just to say that the hemorrhage in the lung may have been related to resuscitation efforts." ★★★

2500 North State St. (39216)

THE FOOD IS EXTRA

The tipping problem in the large cities has become unbearable. Consider the plight of the man in the swanky Chicago restaurant. After being seated and presented with the *haute cuisine* menu in French, he asked the waiter: "What do you suggest?"

Replied the waiter: "Twenty per cent of the check, m'sieu."

Proceedings of the House of Delegates

99th Annual Session
May 15-18, 1967
Biloxi, Mississippi

THE 64TH ANNUAL SESSION of the House of Delegates was convened during the 99th Annual Session of the Mississippi State Medical Association, in pursuance to lawful notice given, on May 15, 1967, on the Fountain Terrace of the Hotel Buena Vista at Biloxi, Mississippi, at 9:05 o'clock in the morning, by Dr. James T. Thompson, the President. The invocation was spoken by the Rev. Van H. Hardin, Pastor of the First Baptist Church, Moss Point, Mississippi.

After extending greetings, Dr. Thompson presented the Vice Speaker of the House of Delegates, Dr. William E. Lotterhos of Jackson, and the Speaker, Dr. Howard A. Nelson of Greenwood, who assumed the chair. Dr. James L. Royals, Chairman of the Reference Committee on Credentials, reported the presence of a quorum of registered and seated delegates in accordance with Section 3, Chapter V, By-Laws of the association.

ANNOUNCEMENT OF REFERENCE COMMITTEES

Reports of Officers and Board of Trustees

Everett Crawford, Tylertown, Chairman
Eldon L. Bolton, Biloxi
Samuel B. Caruthers, Grenada
Victor E. Landry, Lucedale
S. Jay McDuffie, Nettleton

Medical Practices

G. Swink Hicks, Natchez, Chairman
Prentiss F. Keyes, DeKalb
Wesley L. McFarland, Bay St. Louis
Clyde A. Watkins, Sanatorium
R. L. Wyatt, Holly Springs

Miscellaneous Business

James O. Gilmore, Oxford, Chairman
J. A. K. Birchett, Vicksburg

James R. Cavett, Jr., Jackson
John G. Egger, Drew
Charles N. Floyd, Gulfport

Credentials

James L. Royals, Jackson, Chairman
A. F. Dugger, Waynesboro
Wendell H. Stockton, Amory

Rules and Order of Business

B. B. O'Mara, Biloxi, Chairman
Lawrence S. Moffatt, Corinth
Lawrence B. Morris, Macon

APPOINTMENT OF TELLERS AND SERGEANTS-AT-ARMS

Arthur E. Brown, Columbus, Chairman
George E. Gillespie, Jackson
Leo O. Stewart, Pascagoula

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

To assist the Speaker and Vice Speaker in the orderly conduct of the proceedings of this House of Delegates, your Reference Committee on Rules and Order of Business makes the following recommendations:

Conduct of Business. Under the By-Laws, the business of the House must be conducted according to *Robert's Rules of Order, Revised*, and the Speaker and Vice Speaker should prescribe the order of business as set out in the By-Laws. To insure proper recording of the transactions, all delegates recognized should identify themselves. Except for distinguished visitors and those having official capacity in the association, unanimous consent should be obtained for extending the privilege of the floor to nonmembers of the House of Delegates. The report of the Reference Committee on Credentials should constitute the formal and official roll call of the House.

HOUSE OF DELEGATES / Continued

Reference Committees. The purpose of reference committees is for affording all members of the association an opportunity to discuss their views on matters under consideration by the House of Delegates.

Reports. All reports and resolutions presented should be referred to the appropriate reference committee by the chair immediately after their presentation, the only exception being those which are of such a nature as to require no further consideration and are, therefore, ready for decision by vote of this House. Reports published in the *Handbook of the House of Delegates* are considered to have been formally presented and should be referred to appropriate reference committees by the chair. Debate should be reserved on all such presentations until such time as the reference committees conduct formal hearings and when they report to the House.

Resolutions. To avoid burdensome tasks upon the reference committees and to insure that all members have adequate opportunity to discuss their views, the House should permit no introduction of resolutions after the present meeting except for (1) matters of an emergency nature, the validity of such emergency to be determined by majority vote, (2) matters relating to a scientific section or scientific work, and (3) proposed amendments to the Constitution and/or By-Laws which would then lie on the table for one year.

The report of the reference committee was adopted.

ADOPTION OF TRANSACTIONS

On motion by Dr. Stanley A. Hill of Corinth, second by Dr. B. B. O'Mara of Biloxi, the Transactions of the 63rd Annual Session of the House of Delegates, 98th Annual Session of the association, May 9-12, 1966, Jackson, published in Volume VII, Number 8, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, August 1966, were adopted.

REMARKS OF THE SPEAKER

Dr. Howard A. Nelson: May your speaker and vice speaker add their formal greeting to you of the House of Delegates upon whose shoulders will fall the responsibility of decision at this 99th Annual Session. Our tasks are to give you the environment in which you can make the best and wisest decisions and not, in any sense or manner, to try to influence your exercise of this responsibility.

For more than a generation, the work of medical organization has become increasingly complex.

The tasks before the official bodies of our component, state, and national organizations within the structure of official American medicine are more difficult than ever before. We are challenged to make our best even better, our vision keener, our policies more penetrating and farther-reaching, and our tempers, modulated and level.

Shall we say that we are unique in all the nation in the burdens we bear? Hardly so, for we are caught up in a time which defies definition, frustrates logic, and casts aside the new for the newer, even before it can become the familiar, let alone the old.

Shall we say that we of medicine alone in all the nation find ourselves in a maze of complex legislation relating to our practice? Hardly so, for our friends in the business community are equally burdened, and the attorney finds that there is too much to know before the bar.

Shall we say that we are set apart from other professions and learned endeavors by a knowledge explosion with more fallout than the human mind can comprehend? Hardly so, for the chemical literature now actually exceeds that of medicine in sheer weight and volume.

Shall we say that we are among those segments of society with high responsibility, great opportunity, and the challenge to maintain a posture of leadership in the service of others? Indeed we shall, for from the vexation, the trial, the challenge, and the burden can come the greatest expression of our capabilities. We understand the job to be done, the task to be carried forward, the goal to be won.

It is an open secret that there are major issues to be placed before you at this annual session. There will be lively debate, as there should be. But let your speakers ask that light, not heat, characterize the expression of your views. And if a point is well-made once, let us afford our colleagues the opportunity to make another point as we advance our decision-making processes.

As business is formally placed before us today, it will be referred to the appropriate reference committee where those having an interest in the matter may appear and discuss their views. Let us carefully remember that this initial meeting of the House serves the first purpose of informing us and of satisfying the legal requirements of our by-laws in placing matters officially before this body.

When the time for debate comes in the reference committees, let all be present. However well developed a delegate's views on an issue, it is worthless to this House if he expounds them at the patio of the pool or in the bunker of the 11th

hole at Sunkist. We need him in the reference committee.

Worse yet is repetitious debate at our adjourned meeting by those who were absent from the reference committee and find themselves embarrassingly and uncomfortably absent from the consensus which is being reported for decision.

Happily, your speakers fully realize that these remarks are intended for so few of our colleagues as to make their utterance a matter of academic form for the record. The familiar faces of leadership readily confirm this pleasant circumstance.

It is hoped that the innovations your speakers have been able to make this year will assist you in your work as a House of Delegates. For many years, we have wrestled with the problem of reports. Until 1954, we experienced difficulty in assuring ourselves that there would be a single copy of each and every report for reading in the House. By major effort and excellent cooperation, official bodies of the association completed their work in sufficient time for pre-printing so that the delegates' folders might be prepared—even at Sunday midnight—for use at the opening meeting.

The growth of the workload and the multiplying of meetings operated to require more exacting schedules, so that our staff support could match our needs in the substantial increase in work volume. This year, a number of officers and major official, constitutional bodies completed their work by the end of December. Some of their basic annual reports were prepared, coordinated, and agreed to. These were published in your April JOURNAL, meaning that the reports went to press during the last week in February. From this issue, your Handbook was reprinted, and your speakers sent this and a major study report to you almost a month in advance of this meeting. We hope that we may improve this service further.

You have had opportunity to confer with your colleagues at home over these matters, leaving even more time for your devoting to the supplemental reports which, by their very nature, must be recently completed matters for your consideration.

If the presentation of a 10 minute report seems burdensome, let us realize that the reporting body may have wrestled with the matter under discussion during three meetings involving three days and combined travel of 10,000 man miles. If the rhetoric of the report appears painfully formal and overly precise, let us sympathetically understand that the reporting body is making a major effort to say what it means and to mean what it says.

Let our judgments be wise and measured, for

what we decide affects not only a statewide medical and scientific community but a potential 2 million patients as well.

As your speakers have stated in the past, we will not encroach upon your prerogative to say what you wish nor to decide what you will. We shall, however, be deeply concerned over the manner and means through which you exercise these rights and duties. We conceive it our responsibility to assure the rights and privileges of the minority of one, and this shall be done.

In debate of all issues, the test shall be if the discussion is relevant and germane. We respectfully ask that the parliamentary processes be kept simple and direct. Experience has clearly demonstrated that the amateur parliamentarian more often than not twists himself up as badly or worse than anything he inflicts upon his adversaries. We have but to remember that this is a learned body of just men.

As we get about the business of medicine, may your speaker and vice speaker assure you that we are at your service. And if you will permit a personal word, it is the hope of your speaker that this, his last annual session in this chair, may be one where he is able to render a full measure of service and devotion to the duties of the office. As this historic gavel is given to a successor whom you shall name, it will then be my purpose to devote myself fully and completely to the other post of responsibility which you have given into my stewardship. Then, among you in this House, it will be my aim to live up to every injunction now given.

Let us now be about the business of a better profession through enlightened action and the exercise of wise judgment.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

We thank the speaker and vice speaker of the House of Delegates for their fair and impartial guidance of our deliberations during this and prior annual sessions in which they have both served. We especially commend Dr. Nelson and we wish him well as he assumes the post of Delegate to the American Medical Association and know that he will represent us all with honor, dignity, and the highest capability.

The report of the reference committee was adopted.

PRESENTATION OF DISTINGUISHED GUESTS

The Speaker presented the following distinguished guests and member of the association:

Dr. H. H. Hardy, Alexandria, Louisiana, Speaker of the House of Delegates, Louisiana State

HOUSE OF DELEGATES / Continued

Medical Society and fraternal delegate to Mississippi.

Dr. E. Bryce Robinson, Fairfield, Alabama, President of the Medical Association of the State of Alabama and fraternal delegate to Mississippi.

Mr. Edward Uzemack, Chicago, Illinois, Director, Officers Service Department, American Medical Association.

Mr. Whalen M. Strobhar, Chicago, Illinois, Field Representative, American Medical Association.

Mr. Robert F. Etheridge, Chicago, Illinois, Department of Medicine and Religion, American Medical Association.

Dr. J. C. Woosley, Jackson, President, Mississippi Hospital and Medical Service, Inc.

Mr. William G. Shakelford, Jackson, Vice President, Mississippi Hospital and Medical Service, Inc.

Dr. George F. Lull, Chicago, Illinois, Executive Administrator, Illinois Medical Society, the only Honorary Member of the Mississippi State Medical Association.

ADDRESS OF THE PRESIDENT

The Speaker declared the House of Delegates in open session, and the President, Dr. James T. Thompson, delivered his address. The address has been published separately in Volume VIII, Number 7, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, July 1967.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee heartily and enthusiastically commends our president, Dr. James T. Thompson of Moss Point, on his splendid address to the House of Delegates and for his diligent and devoted discharge of duties during the 1966-67 association year.

We believe that Dr. Thompson will long be remembered for his work and for his wise counsel to us all. Your reference committee wishes to quote a portion of his paper to this House of Delegates:

"We are the witnesses to a vital era when the socioeconomics of medicine is changing to match the progress in medical science. Almost no practical, realistic man hold as tenable the growing gap between scientific capability and delivery capacity."

Dr. Thompson continued by pointing out that at the moment the several states, particularly

through their state medical associations, hold the initiative in these connections and he stated "This is a challenge for change, and I believe that he who fails to respond to the challenge will not be a factor in the change."

In approving fully the report of the President, your reference committee commends Dr. Thompson and thanks him for his service to our profession and our association.

The report of the reference committee was adopted.

SPECIAL ADDRESS

Dr. Milford O. Rouse of Dallas, Texas, President-elect of the American Medical Association, addressed the House of Delegates.

SPECIAL RECOGNITION

On recommendation by the Board of Trustees, a special plaque of recognition was presented in behalf of the association to Dr. J. D. Williams, Chancellor of the University of Mississippi, whose retirement had been announced. The plaque expressed the association's appreciation for Dr. Williams' service to the state and to the medical profession as demonstrated by his interest in and support of the University Medical Center. The presentation was made by the President, Dr. Thompson, and Dr. Williams, in accepting, made appropriate remarks. The House of Delegates accorded him a standing ovation.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Recent Amendments. At the 98th Annual Session in 1966, The House of Delegates adopted an amendment to Article IV, Section 1, of the Constitution and amendments to Chapters I and XII of the By-Laws which abolished the degree of membership known as "scientific." There are now only three degrees of membership, Active, Emeritus, and Associate. These amendments became effective with the 1967 membership year.

99th Annual Session. At the close of business at the 98th Annual Session, there were no pending amendments to the Constitution or By-Laws lying on the table. Accordingly, your council will be prepared to conduct hearings on any proposed amendment which may come before the House of Delegates at the present annual session.

The report of the Council on Constitution and By-Laws, requiring no action, was received for information.

REPORT OF THE BOARD OF TRUSTEES

Organization and Duties. The Board of Trustees is the executive and governing body of the associ-

ation during vacation of the House of Delegates. It is additionally charged with duties and responsibilities prescribed by law for directors of corporations. In the discharge of these duties, the Board shall have conducted six formal meetings over a period of seven meeting days since the 98th Annual Session when this report is considered by the House of Delegates. The Board met in May, August, and December of 1966, and in February of 1967. Meetings are scheduled for April and May of 1967. Matters treated in this annual report include referrals from the House of Delegates and those items relating to management and policy functions in connection with the Board's responsibilities.

Referrals from the House. Matters referred by the House of Delegates at the 98th Annual Session and those actions by the House requiring Board action included:

(a) *Irregular Practitioners.* The House adopted a recommendation that "the State Board of Health rigorously enforce the Medical Practice Act to the end that all irregular practitioners who may be in violation thereof be prosecuted as provided by law." In this connection, the Board formally transmitted to the State Board of Health its studies and recommendations on judicial actions against the cult of chiropractic, especially as decided by the U. S. Supreme Court in the case of *England v. Louisiana State Board of Medical Examiners*. Continued close liaison with the State Board of Health was maintained with reference to the unlawful selling of nostrums and other illegal practitioners. The Executive Officer of the State Board of Health has also reported in detail to the Board of Trustees on investigations of chiropractors, faith healers, out-of-state nurses in community action health programs, and of pharmacists in two instances.

(b) *Federal Narcotics Stamps.* In further development of the requirement that members of the association must possess a valid federal narcotics stamp with certain stated exceptions, the Board of Trustees has caused the standard form for application for membership to be revised to reflect this information, requiring either the number of the stamp or a statement from the applicant why he possesses none. Additionally, component medical societies have been specifically notified of this requirement as a condition of membership. When a physician is placed on probation or suffers revocation or suspension of his license for this (or any other) reason, this information is published to component medical societies and state officers in the Monthly Directory Supplement.

(c) *Membership.* The degree of association membership designated as scientific was abolished

by the House of Delegates at the 98th Annual Session and became finally effective with the beginning of the 1967 association year. There are now only three degrees of membership: Active, Emeritus, and Associate. The By-Laws provide for the election of applicants solely on a basis of personal and professional qualification.

(d) *Council on Scientific Assembly.* The By-Laws were revised to require election of scientific section secretaries for terms of three years effective with the 99th Annual Session. To fulfill requirements of the By-Laws as to staggered terms for the seven section secretaries, it will be necessary to elect two for one year, two for two years, and three for three years at the 99th Annual Session. As before, section chairmen will be elected for terms of one year each. The amendment will enlarge the council to 15 members, thereby adding seven new members to the House of Delegates.

Labeling of Prescriptions. The AMA Council on Drugs requested each state medical association to take a formal position on identifying drugs prescribed on the prescription label. Since 1963, the AMA council has taken the position that physicians should so authorize the pharmacist, the only exception being when such disclosure would be detrimental to the well-being of the patient.

In advocating this practice, the AMA council believes that the patient has the right to be informed about his illness and medications prescribed, that the information is valuable in the continuity of care, that it is useful in event of accident or overdosage, that it is a convenience to physicians, that it helps prevent error on the part of the patient who is taking two or more different drugs simultaneously, and that it is useful if it became necessary to issue a warning against a drug.

Against labeling are arguments that it may lead to self-medication, that it may confuse or trouble the patient, that the practice reduces the stature of the physician and his medication to that of an over-the-counter preparation, that labeled containers may be used for other drugs with disastrous results, and that labeling lends itself to channeling drugs into illicit markets.

The Board believes that prescription drugs should be identified on the label when the prescribing physician so directs and should not be labeled in the absence of such instructions.

State Board of Health. In June 1966, the Governor of Mississippi, acting on nominations made by the House of Delegates under law, reappointed Dr. Joseph G. McKinnon of Hattiesburg to a six year term on the State Board of Health and appointed Dr. H. C. Ricks, Sr., to a full term. The Governor did not act at that time to fill the vacan-

cy in Public Health District 7 occasioned by the death of Dr. S. E. Field of Centreville. One nominee for the post asked that his name be withdrawn, and the Board of Trustees, acting under its authorities, made another nomination. The Governor then appointed Dr. G. Swink Hicks of Natchez to a full term, thereby filling all vacancies then existing. Under actions of the 1966 regular session of the legislature, an optometric member has been appointed. By law, this member may not participate in activities of the board relating to medical licensure.

Board of Physical Therapy. The 1966 regular session of the legislature enacted a physical therapy licensure law, and the measure was supported by the association. The act provides for a five member board consisting of two physicians and three physical therapists. The law contains no provisions for making nominations for appointees, but the Governor is required to appoint physicians from the membership of the association. Physicians appointed to the board are Drs. William E. Lotterhos and Louis A. Farber of Jackson.

Committees of the Board. The Board of Trustees is assisted in its work by four constitutional and eight *ad hoc* committees. For reporting purposes, four of the eight councils report to the Board.

(a) *Advisory to the Auxiliary.* Officers of the Woman's Auxiliary consult the committee from time to time on programs and policies. One joint meeting was conducted by the Board of Trustees during the year with the committee and Auxiliary president. The Auxiliary project for the 1966-67 association year was health careers recruitment with emphasis on nursing careers.

(b) *Grievance.* The committee processed written complaints under policies requiring initial referral to the component medical society concerned through the appropriate member of the Board of Trustees. The committee considered no cases of original jurisdiction and was not called upon to sit in an appellate capacity. The Board is gratified at the low frequency of complaints and with action taken upon such complaints by component medical societies.

(c) *Publications.* This committee, consisting of three appointed members and the three editors, conducts the largest single association program, that of publishing the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. Continuing the strong trend established in 1965, the seventh year of the JOURNAL showed gains in advertising and scientific-editorial content. A notable special issue on nuclear medicine gained wide acclaim. Increased advertising revenues have enabled the com-

mittee to expand state and local news services almost threefold. The Board commends the editors and committee for their services to the scientific work of the association and for their successes.

(d) *Medicine and Religion.* Working closely with the AMA Department of Medicine and Religion, the committee is reviewing and revising its program of seeking closer communication between medicine and clergymen in the interest of the whole patient. The committee was represented at the 1967 Conference on Medicine and Religion sponsored by AMA.

(e) *State Medicare Review Board.* Growth of the armed services by reason of the Viet Nam War and extension of benefits to retirees are resulting in growth of the Dependents' Medical Care Program. To assure a consistently high level of service to physicians, the Medicare Department in our headquarters has been expanded. The Board appointed a fourth member to the Review Board, an orthopaedic surgeon. The Board extends appreciation and commendation to the Review Board for further improvement in the program and for its uncompensated service to the profession.

(f) *Other Committee Activity.* The Committee on Medical Aspects of Driver Limitation continues to work with the Mississippi Highway Safety Patrol, and the examination program by private physicians has accelerated. We continue to find satisfaction in the Patrol's seeking the advice of the association in these medical matters, and we have assured the continuing services of the committee in the environment of cooperation. The Board of Judges for the MSMA-Robins Award consists of the three association vice presidents, but the Board permitted one to disqualify himself this year because his associate was among the nominees. Provision was made for another member. The 1967 awardee will be announced at the adjourned meeting of the House of Delegates.

Because of little activity of interest to medicine in the 1966 special session of the legislature, the Committee on Legislative Liaison was not reactivated. The Board has traditionally followed the practice of appointing this *ad hoc* group on regular legislative years. A liaison committee with Blue Cross-Blue Shield, consisting of the three Trustees who are also members of the board of directors of the Mississippi Hospital and Medical Service, was appointed.

At the request of the Mississippi State Bar, a three member liaison committee was appointed on an *ad hoc* basis until such time as a change can be made to make this a committee of the Judicial Council.

Legislation. The 1966 regular session of the legislature was conducted from January 4 through

June 17, 1966. A total of 2,100 bills was introduced, and 890 were enacted into law. About 150 bills related to matters of health and medical interest. Without duplicate introductions, these totaled 85 bills of which 31 passed and 54 failed. Of these, the association supported 20, took no position on 53, and opposed 12.

Only three bills opposed by the association were passed. Ten bills supported by the association were passed.

Among important enactments originated and/or supported by the association were the Battered Child Law, the defining of blood banking and transfusion procedures as a service and not a sale, licensure of physical therapists, transferring the duties of the State Medical Education Board to the Board of Trustees of Institutions of Higher Learning, increasing salaries for medical service at the Parchman State Penitentiary, codifying law concerning consent to surgery, providing for donation of transplantable portions of the human body, inauguration of a plasma-phoresis program at Parchman, stiffening of the fireworks law, and providing for payment for medical services to prisoners by county boards of supervisors.

An amendment to the law providing for a new method of electing the dental member to the Board of Health, introduced by the Mississippi Dental Association, resulted in a further amendment placing an optometrist on the State Board of Health. Two other enactments in behalf of optometrists, one on insurance benefits and the other on applicants for visual assistance, were passed over the association's opposition.

Proposals for licensure of chiropractors, creation of a basic science board, mandatory PKU testing, and three less desirable versions of the Battered Child Law were defeated, and the association actively opposed each.

The Emergency Medical Care Unit was operated at the State Capitol during the regular and special sessions.

Auxiliary Communications Program. Officials of the Woman's Auxiliary are deeply concerned about a lack of communication with their members, and they desire to establish a publication which would inform their members and give them greater incentive for involvement in programs. A three-issue-per-year publications schedule has been suggested, and the Advisory Committee to the Woman's Auxiliary concurs in the proposal. The Board of Trustees, therefore, recommends that the association assist the Woman's Auxiliary financially in this project in furnishing up to \$500 per year for this purpose. The newsletter-type publication would be issued during the summer, in January prior to the Auxiliary Executive Board

meeting, and prior to the annual session. The Board believes that the publication will assist in promoting membership gains which are needed and in increasing attendance at the annual session.

Other Actions. At the invitation of the Mississippi School Health Service, Dr. W. M. Dabney of Crystal Springs was appointed by the Board of Trustees to the Interagency Committee on Smoking and Health. The Board arranged for representation of the association at the Third National Congress on Medical Quackery, the First National Congress on the Socioeconomics of Health Care, and at the first AMA Conference on Emergency Medical Services.

Organization of the Board. Dr. Lyne S. Gamble of Greenville was welcomed as a new member of the Board, succeeding Dr. C. W. Patterson of Rosedale as District 1 Trustee. During the six meetings, there were no absences. 1966-67 officers of the Board are Drs. John B. Howell, Jr., chairman; Lamar Arrington, vice chairman; and C. D. Taylor, Jr., secretary.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee is deeply impressed with the tremendous amount of business and the great devotion of time given to the work of our association by the Board of Trustees. During the year, this group has met on six occasions requiring travel from all points in the state. We thank the Board for its annual report which recounts various actions previously mandated by the House of Delegates. We endorse this report and recommend its approval by the House of Delegates. In these connections, we call attention to the Board's recommendation that the association furnish sums of money up to \$500 per year to our Auxiliary for the publication of their new newspaper, "Distaff."

We also recommend that the Emergency Medical Care Unit at our legislature be continued. We feel that the Emergency Medical Care Unit has generated a great amount of goodwill in the legislature and while we recognize that there have been problems in staffing of the unit, we believe that if more physicians will participate, this service can be successfully continued. We, therefore, ask that the Board of Trustees restore the necessary money to our annual budget for operation of the Emergency Medical Care Unit during the regular sessions of the legislature and any special sessions which may be called.

In discussion of that portion of the report relating to discontinuation of the Emergency Medical Care Unit for the Legislature at the Capitol, Dr. J. T. Davis of Corinth, Chairman of the Council on Budget and Finance and a member of the

HOUSE OF DELEGATES / Continued

Board of Trustees, presented the position of his council and the Board in opposition to the recommendation of the reference committee. He described the difficulty in staffing the unit with doctors of the day, the low utilization of the unit by those whom it is intended to serve, and the resulting costs which are high, especially on a per visit cost basis. Dr. S. S. Kety of Picayune spoke in opposition to the recommendation of the reference committee.

Drs. Lawrence W. Long of Jackson, A. V. Beacham of Magnolia, Eldon L. Bolton of Biloxi, and Byron A. Mayo of Drew spoke in support of the recommendation of the reference committee. The Vice Speaker, Dr. Lotterhos, spoke from the floor as a member of the House of Delegates and Chairman of the Council on Legislation in support of the recommendation of the reference committee.

After the discussion was concluded, the Speaker put the motion of the chairman of the reference committee, and the report was adopted.

SUPPLEMENTAL REPORT "A" OF THE BOARD OF TRUSTEES

Title XIX of Public Law 89-97: Care for the Needy. Title XIX of Public Law 89-97 provides a mechanism for each state to purchase medical and health care services for each adult and child resident who is found needy under a means test devised and administered by the state. Benefits under Title XIX are based solely on demonstrated financial and medical need, and each state administers its own Title XIX program. Since most physicians are familiar with the provisions of this law, it is not described further in this report. There is attached to the report a brochure which was developed by the association and which describes the provisions, benefits, and manner of implementation of Title XIX.

Policy on Title XIX. The Mississippi State Medical Association supports the implementation of Title XIX in the state, and this is consistent with association policy developed over a number of years. The program is neither new nor is it a departure in financing medical care for the needy. It is an updating of vendor medical care titles and Kerr-Mills which date back respectively to 1950 and 1960.

Prior to the enactment of Title XIX, which is incidental to rather than directly related to Title XVIII, your association, through the House of Delegates, had adopted five significant policies in this connection:

(1) *Definition Policy.* In 1957, the House of Delegates laid down a broad principle on all programs of medical care financing. It states:

"It is essentially undesirable for professional services to be purveyed by hospitals, corporations, and/or political subdivisions where fees for services are involved either from the patient or a responsible third party *except for statutorily established and medically accepted programs of government which are not disapproved by the association.*"

The breadth of the policy is immediately appreciated when it is recalled that it has been applied to the Dependents' Medical Care Program, Workmen's Compensation, Veterans Administration care, the vendor medical titles, and Kerr-Mills.

(2) *Acceptability Policy.* In 1961, the House of Delegates adopted a policy defining the four characteristics of federal medical programs which were not acceptable. They are these:

- (a) Universal compulsion.
- (b) Total federal funding.
- (c) No local (state) control.
- (d) Benefit eligibility without reference to need, resources, or means.

As was the case with Kerr-Mills, not a single one of these characteristics applies to Title XIX.

(3) *Criteria Policy.* In 1961, the House of Delegates also approved a policy for public support of medical care programs:

"Personal medical care is primarily the responsibility of the individual. When he is unable to provide this care for himself, the responsibility should properly pass to his family, the community, the county, the state, and only when these fail, to the federal government, in the above order.

"The determination of medical need should be made by a physician, and the determination of eligibility should be made at the local level with local administration and control. The principle of freedom of choice should be preserved. The use of tax funds under the above conditions to pay for such care is inherent in this concept."

Title XIX meets these tests.

(4) *Adequacy Policy.* In 1962, the House of Delegates reviewed actions taken by the state of

Mississippi with reference to the Kerr-Mills program. The House stated:

“... there has been an insufficient implementation of the Kerr-Mills program in Mississippi. This implementation is less than that necessary or satisfactory as regards physicians, hospitals, and the public.”

(5) *Responsibility Policy.* The association's role of concern and responsibility was stated by the House of Delegates in 1966:

“Where this title (Title XIX) is implemented, administration and control of the program, with the exceptions of certain minimums as to services offered, are vested in the state through a single state agency. If this title is implemented in Mississippi, your reference committee believes that the association has not only a legitimate interest in the operation of the program but an obligation and duty in this connection as well.”

This policy has guided the Board in the development of further policy presented in this report as regards the operation and administration of Title XIX. The policy foundation on this program has been carefully developed with considered judgment over 10 years and, indeed, requires the association's active participation in both the development and administration of a Title XIX program in Mississippi.

Six Point Positive Policy. After extensive and careful study of Title XIX, program implementation in other states, and the status and development of medical care for the indigent in Mississippi, the Board of Trustees commends the following six-point positive policy on Title XIX to the House of Delegates:

(1) Title XIX offers the most desirable course of action in providing comprehensive medical services for all needy citizens in the light of alternatives which are virtually assured in its absence. Since Title XIX is largely local in nature as to administration, scope of services beyond statutory minimums, participation by physicians, hospitals, and others, it merits support.

(2) Any implementation of Title XIX in Mississippi should, in the interest of patients and their receiving care in their home communities, assure free choice of physician, hospital, and nursing home.

(3) The State of Mississippi must initiate immediately a thorough and comprehensive study and re-appraisal of all of its health care programs

with the goals of improving both the quality and quantity of care, of eliminating duplication, and of eliminating inequities upon potential recipients, areas of the state, taxpayers, and providers of the care.

(4) While it is the duty and obligation of the Legislature to fund a Title XIX program when such is enacted into law, the Mississippi State Medical Association will offer its full resources in assisting and advising in this connection toward the end of faithfully supporting all worthy and lawful effort to establish such a program in the state. This assistance and advice includes the furnishing of a committee as specified by law for advising in the operation of the program.

(5) The fiscal administrator for Title XIX in Mississippi must be a competent private or public organization which commands the trust and respect of physicians, hospitals, and all involved in furnishing services. The fiscal administrator must be medically oriented, responsive, efficient, and adequately reimbursed for its services on a non-profit basis.

(6) Implicit in the implementation of Title XIX is the discontinuation of any existing state health and medical program which is conducted with only state funds and/or which would include any individual eligible for services under Title XIX.

Regional Information Meetings. Recognizing the need for information and discussion on Title XIX, the Board of Trustees developed and scheduled, in cooperation and partnership with component medical societies a series of six regional information meetings on this subject. Two component medical societies asked to defer these meetings until later in 1967. The regional meetings conducted under Board and local society sponsorship were:

February 21

District 8, Natchez

February 23

District 7, Hattiesburg

March 15

District 9, Biloxi

March 23

Districts 1 and 4, Greenwood

March 30

District 3, Tupelo

April 6

District 2, Oxford

The regional meetings were well-attended and reflected interest by physicians, dentists, hospital trustees and executives, members of the Legislature, and others in state and local government.

HOUSE OF DELEGATES / Continued

The program consisted of two presentations on the law itself, illustrated by 52 slides in color, and a summary address by a principal association officer. The Board is indebted to Dr. Thompson, the president, and to Dr. Nelson, the speaker, who shared equally in making this address during the meetings.

Recommendations. In commending both this policy and program to the House of Delegates, the Board of Trustees recommends publication of the six-point positive policy in brochure form and further recommends that this new brochure and the descriptive brochure used during the regional informational meetings be mailed to the membership and to all candidates for election to the Legislature.

The Board of Trustees will welcome with appreciation a further expression from the House of Delegates in this vitally important program as to policy, implementation, development, and administration in the best interests of patients, the state, and the practicing profession.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee commends the Board of Trustees for their studies, deep and probing appraisal, and informative work on Title XIX of Public Law 89-97. In approving this report of the Board, we recommend that the six point positive policy be published in brochure form and circulated to every member of the Mississippi State Medical Association and to all candidates for election to the legislature. We also recommend that the brochure which was published for use during the regional informational meetings be sent to candidates for the legislature along with the six point positive program. We ask that the association sponsor legislation which is thoroughly consistent with the recommendations of the Board of Trustees and endeavor to implement a Title XIX program in the state of Mississippi at the earliest possible moment.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "B" OF THE BOARD OF TRUSTEES

Central Office Headquarters Building: At the 87th Annual Session in 1955, the House of Delegates authorized construction of our Central Office Headquarters Building at Jackson. It was formally opened upon the observance of our centennial at the 1956 annual session. In 1959-60, also upon authority of the House of Delegates, the building

was expanded with a new west wing, the costs of the latter being paid from existing resources. The amortization of the building was set initially for 15 years at 4¼ per cent interest, and the association's long-term liability in this connection has been reduced to \$19,200.80, as reported in the 1966 audit. The building has served us well and has fulfilled expectations as to function and value.

Association Activities. As has been true of virtually all state medical associations and the American Medical Association, our scope and level of activities have grown substantially during the past 10 years. In 1966, the House of Delegates concurred with the Board's recommendation that a dues increase of \$10 be authorized to assist in maintaining desired and necessary association services, and this increase has been valuable.

Because of its responsibility to plan for the future, the Board of Trustees, in anticipation of the need to expand the building, authorized feasibility studies by our architect, and we have received and considered his report. His planning proposes an expansion of 4,960 square feet in two levels of 3,076 and 1,890, respectively, to the south. Because our site falls to the south, the lower level would be at grade by excavation.

The plan also calls for site improvement to increase our off-street parking facilities from nine to 32 parking spaces.

Preliminary drawings and elevations, together with the architectural artist's rendering will be available to members for inspection during this annual session.

Action of the Board. After consideration of the studies and the needs which prompted the authorization of the studies, the Board of Trustees advises the House of Delegates that the present building is serving your association at full capacity and if additional activities are undertaken, the building should be expanded. In such case, we recommend that the Board of Trustees be authorized to add the additional space under suitable contract agreements.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee considered the supplemental report of the Board of Trustees with reference to expansion of the Central Office Headquarters Building. We concur with the Board in that the building has been a wise and useful investment and we approve the proposals of the Board with reference to expansion of the building.

We ask that the House of Delegates give the Board necessary authority to construct the proposed expansion after the consideration of bids

and the awarding of contracts as has been done with the building in the past.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "C" OF THE BOARD OF TRUSTEES

Joint Billing of AMPAC and MPAC Dues: Organization. The Mississippi Medical Political Action Committee is organized pursuant to an action of the House of Delegates at the 95th Annual Session in 1963. MPAC is a voluntary, non-profit, unincorporated political action committee under the provisions of Sections 302 and 610 of the Federal Corrupt Practices Act, and it is identical in these respects to political action committees in all other states. Although separate and autonomous, each PAC is affiliated with AMPAC, the American Medical Political Action Committee. Your MPAC Board of Directors consists of 10 members, a physician from each of the nine association districts and a member of the Woman's Auxiliary.

Program Reactivation. In 1965, MPAC became inactive. Following reappointment of its Board of Directors by the Board of Trustees in 1966, the program was reactivated, literature was produced, and a membership campaign was initiated by the directors.

In consultation with AMPAC officials, the MPAC board made the decision to recommend joint billing of PAC dues with regular medical association dues. Two component medical societies adopted this procedure in connection with the 1967 dues billing, and the pilot program was encouraging. The two societies now have a majority of our PAC members.

Such joint billings make it clear that MPAC and AMPAC dues are voluntary and nondeductible for tax purposes. The joint billing practice is recommended to all state medical PAC's by AMPAC and AMA. It not only assists in reminding physicians of their opportunities in this connection but also affords convenience in combining annual payments.

Recommendation. The Board of Trustees recommends that the House of Delegates endorse joint billing of PAC dues with regular medical dues with the clear explanation on the billing statement that PAC dues are voluntary and not deductible for tax purposes.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee approves the supplemental report of the Board with reference to joint billing of MPAC and AMPAC dues together

with regular dues for component medical societies, the state association, and the AMA. We especially point out that political action committee dues should be identified on billing statements as being completely voluntary and not tax deductible.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "D" OF THE BOARD OF TRUSTEES

Blue Shield: The Issue of Blue Shield. At each of the annual sessions in 1964, 1965, and 1966, resolutions were introduced concerning Blue Shield in Mississippi. In 1964, the resolution related to Blue Shield fees. The 1965 resolution urged that the association explore the feasibility of establishing a separate Blue Shield plan in the state. In 1966, the resolution urged the association to prepare to operate Blue Shield. The 1964 and 1965 resolutions were referred to the Board of Trustees. No action was taken on the 1966 resolution in view of adoption of a report from the Board.

At the 98th Annual Session in 1966, the Board of Trustees presented a major research and study report to the House of Delegates entitled "Blue Shield in the United States." The study, made at the direction of the Board, analyzed each of the 74 domestic Blue Shield plans and the operation of Blue Shield throughout the nation.

The Board also reported on its 1965-66 deliberations over Blue Shield and made the following recommendation to the House of Delegates which was adopted:

"The Board of Trustees feels that the indulgence of the House of Delegates should be given the matter posed in Resolution No. 11 (1965) and that with the cooperation of Dr. Woosley and his colleagues, which we have been assured, and with the continued cooperation of the 12 physician-directors, a more satisfactory plan can be developed. We ask this indulgence for a period of one year, believing that Dr. Woosley should be given the opportunity to effect internal changes as he sees fit toward realizing the goals mentioned."

In approving this recommendation, the House of Delegates also approved five specific proposals relating to the Blue Shield plan:

(1) An equitable distribution of benefit monies which the plan has with the clear understanding that physicians seek to receive only Blue Shield funds for services rendered.

HOUSE OF DELEGATES / Continued

(2) An increase in Blue Shield benefits to a more realistic level.

(3) Use of a relative value index furnished by the Mississippi State Medical Association and developed by the association.

(4) Continuation of Blue Shield benefits on an indemnity basis only.

(5) Re-evaluation of the manner in which plan benefits are presented to the public by the plan in its sales, advertising, and communications programs.

In addition to approving these five specific proposals, the House of Delegates directed that:

"The Board of Trustees be requested to use the methods that are necessary to achieve a more equitable distribution of benefit monies under the plan and that the Board continue to work with the Mississippi Hospital and Medical Service for the objectives outlined in the report."

Acting on point (3), the Board has voted to adopt the California Relative Value Index with such modifications as are necessary in the future.

Fundamental Questions. It has been stated that the Board of Trustees is obliged to furnish the House of Delegates with answers to these three fundamental questions:

—Has the year of indulgence been fruitful as regards physicians and the association?

—Of the five specific proposals relating to the plan, what has been achieved?

—What has the Board of Trustees been able to do under the charge by the House of Delegates that "the Board of Trustees be requested to use the methods that are necessary to achieve a more equitable distribution of benefit monies under the plan and that the Board continue to work with the Mississippi Hospital and Medical Service for the objectives outlined in the report"?

Conference and Liaison. During Board meetings on August 17-18 and December 7, 1966, and February 22 and April 20, 1967, the entire issue was discussed and explored in breadth and depth. A majority of the December 7 meeting was devoted to conference with Dr. J. C. Woosley, the plan president, and Mr. William G. Shakelford, vice president for Blue Shield.

Numerous conferences with Blue plan representatives were conducted at Board of Trustees

and executive staff levels. Effective with the December 7 meeting, the Board furnished copies of its minutes as related to discussions and actions on Blue Shield to the physician-directors and to Dr. Woosley and Mr. Shakelford. Emphasis was placed on communicating news of the plan to the membership through the pages of our JOURNAL.

There was exchange of written communications between the Board of Trustees and the plan as to matters under discussion, identity of Blue Cross and Blue Shield, contract description, the physicians' manual, the Blue Shield claim form, and other aspects of the issue.

The Board of Trustees reviewed the plan's income and expense statements for 1964, 1965, and 1966 through October, and these are furnished for the information of the House of Delegates:

	Blue Cross	Blue Shield
1964 Income	\$17,116,709	\$4,560,987
	60,455	60,455
Claims Paid	15,627,390	3,795,168
Administrative Expense	907,577	907,577
1965 Income	\$18,766,617	\$4,806,574
	68,389	68,389
Claims Paid	17,231,015	3,893,191
Administrative Expense	917,740	917,740
1966 Income	\$17,250,823	\$3,838,203
	79,326	79,326
Claims Paid	16,673,078	3,199,482
Administrative Expense ...	775,332	775,332

It is noted, as has historically been the practice of the plan, that total administrative expense is divided equally between Blue Cross and Blue Shield.

In conference with the Board, Dr. Woosley suggested several possible courses of action among which were (1) refining the present program and contract improvement effort, (2) marketing Blue Shield on the basis of a relative value index and seeking future gradual escalation of benefits, (3) adopting a "prevailing fee" program which would be full service, and finally (4) the state medical association's withdrawing approval of the plan for Blue Shield with the consequent loss of the Blue Shield symbol but with the plan continuing as Blue Cross only with a surgical-medical rider.

During the year, the Board has earnestly explored approaches to solutions as asked to do by the House of Delegates. Care has been exercised to take only those actions which would assist in reaching solutions. As Dr. Woosley has pointed out, dues (premiums) increases have been made for Blue Cross but not for Blue Shield.

A "more equitable distribution" of plan benefits has, therefore, not been achieved, nor has there been "an increase of Blue Shield benefits to a more realistic level."

Finding and Recommendation. In summary, the matter of Blue Shield was at issue prior to the 1966 annual session when the Board of Trustees, in response to the 1965 resolution, made the research study. The Board requested that the House of Delegates grant it a year in which to continue conference and liaison, especially in view of the then-recently altered executive staffing of the plan.

The House of Delegates granted the Board's request and specified five points and a further charge with the additional time limited to one year. The Board of Trustees is not satisfied with the accomplishments realized in the time granted by the House and recommends that the Mississippi State Medical Association withdraw its approval of the Mississippi Hospital and Medical Service for Blue Shield. The Board recommends that the association apply for a charter and the Blue Shield symbol from the National Association of Blue Shield Plans and implement a program when feasible under the auspices of the association. We recommend that the association continue to offer to furnish 12 physician-directors to the plan for Blue Cross.

REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF OFFICERS AND
BOARD OF TRUSTEES

Your reference committee considered the supplemental report of the Board of Trustees relating to Blue Shield in Mississippi. We fully realize, as does every member of the House of Delegates, that this matter has been at issue for a number of years before official bodies of our association.

We were pleased that more than 40 members of the association and others appeared in this connection before our committee. Our deliberations were thereby greatly enlightened and we appreciated this giving of time to this vital and urgent question which is before us at the 99th Annual Session.

In 1966, the Board of Trustees asked that the House of Delegates grant it one year during which to continue negotiations and liaison with the plan so that the matter posed in Resolution No. 11 of the 1965 annual session might be delayed and that the Board might be able to seek the development of a more satisfactory Blue Shield Plan in Mississippi.

In granting the request of the Board of Trustees for this time of one year, the House of Delegates also charged the Board with seeking:

(1) An equitable distribution of benefit monies which the plan has with the clear understand-

ing that physicians seek to receive only Blue Shield funds for services rendered.

(2) An increase in Blue Shield benefits to a more realistic level.

(3) Use of a relative value index furnished by the Mississippi State Medical Association and developed by the association.

(4) Continuation of Blue Shield benefits on an indemnity basis only.

(5) Re-evaluation of the manner in which plan benefits are presented to the public by the plan in its sales, advertising, and communications programs.

The House also directed the Board "to use the methods that are necessary to achieve a more equitable distribution of benefit monies under the plan and that the Board continue to work with the Mississippi Hospital and Medical Service for the objectives outlined in this report."

The Board of Trustees has stated that it feels obligated to furnish this House of Delegates with answers to three questions:

(1) Has the year of indulgence been fruitful as regards physicians and the association?

(2) Of the five specific proposals relating to the plan, what has been achieved?

(3) What has the Board of Trustees been able to do under the charge by the House of Delegates that "the Board be requested to use the methods that are necessary to achieve a more equitable distribution of benefit monies under the plan and that the Board continue to work with the Mississippi Hospital and Medical Service for the objectives outlined in the report?"

In addition, the Board has, under authorities given it during the 98th Annual Session by this House of Delegates, adopted a California Relative Value Index with such modifications as may be necessary in the future.

The Board states that it is not satisfied with the accomplishments realized during the year which was granted by the House of Delegates. Your reference committee approves the findings and recommendations of the Board of Trustees and recommends that the House of Delegates of the Mississippi State Medical Association withdraw its approval of the Mississippi Hospital and Medical Service as a Blue Shield plan. We further recommend that the association now proceed to apply to the National Association of Blue Shield Plans for a charter and use of the Blue Shield symbol and proceed to implement a program when feasible under the auspices of the Mississippi State Medical Association.

We further recommend that the association continue to offer to furnish 12 physician-directors

HOUSE OF DELEGATES / Continued

to the plan for Blue Cross.

The chairman of the reference committee moved that the report be adopted, and the floor was opened for discussion by the Speaker. Dr. Walter H. Simmons of Jackson spoke in opposition to the report of the reference committee. Dr. Lawrence W. Long of Jackson made a substitute motion to amend the second from last paragraph in the report of the reference committee to delete the period at the end of the second sentence thereof and add "if further improvement is not forthcoming."

The motion proposed the deletion of the word "now" in the third sentence and the addition of "authorize the Board of Trustees to" immediately following the deleted word. At the end of the third sentence of the paragraph, the motion proposed to substitute a comma for the period and add "if we do not receive further improvements." Thus, the motion for amendment would cause the paragraph to read:

"The Board states that it is not satisfied with the accomplishments realized during the year which was granted by the House of Delegates. Your reference committee approves the findings and recommendations of the Board of Trustees and recommends that the House of Delegates of the Mississippi State Medical Association withdraw its approval of the Mississippi Hospital and Medical Service as a Blue Shield plan if further improvement is not forthcoming. We further recommend that the association authorize the Board of Trustees to proceed to apply to the National Association of Blue Shield Plans for a charter and use of the Blue Shield symbol and proceed to implement a program when feasible under the auspices of the Mississippi State Medical Association, if we do not receive further improvements."

Dr. Simmons then made a second substitute motion to table the entire matter for one year and requested a secret, written ballot. The substitute motion was seconded by Dr. S. H. McDonnial of Jackson. In discussion of the Simmons substitute motion, Dr. Joseph B. Rogers of Oxford asked if it were not a fact that the motion to table would cut off debate. Dr. Andrew K. Martinolich, Jr., of Bay St. Louis, made a parliamentary inquiry if a motion intended to cut off debate did not, in fact, require a two-thirds majority. The chair ruled that any motion to cut off debate required a two-thirds majority to be sustained, and he applied the ruling to the Simmons substitute motion. There was no appeal from the ruling of the chair.

There being no further discussion, the secret, written ballot on the Simmons substitute motion was taken, and the chair announced that the motion was lost on a vote of 41 to table and 39 opposed. The Long substitute motion therefore became the pending business.

In discussion, Dr. A. V. Beacham of Magnolia, identifying himself as Vice Chairman of the Board of Directors of the Mississippi Hospital and Medical Service, Inc., spoke in opposition to the motion. Dr. Charles M. Moore of Philadelphia made a parliamentary inquiry as to the pending business and the main motion of the chairman of the reference committee, and the chair responded that the Long substitute motion was the pending business.

Dr. Simmons spoke in opposition to the Long motion and explained the procedure of the National Association of Blue Shield Plans when a state medical association withdraws approval of a plan within its association area. The chairman of the reference committee, Dr. Everett Crawford of Tylertown, spoke from the floor as a member of the House of Delegates and stated that if the association were to withdraw approval and apply for a Blue Shield charter and use of the symbol, these would probably be awarded to the association.

Dr. Rogers, in further discussion, reviewed the long hours over many meeting days devoted to the Blue Shield issue by the Board of Trustees and the continuing negotiations with the plan. He described the increases in hospital benefits, pointing out that there had been no concomitant increase in medical benefits. Dr. Lamar Arrington of Meridian said that the Board of Trustees was not unanimous in its decision, there being five Trustees for the report. Dr. Rogers replied that only two Trustees voted against the report, there being one absent and the chairman not voting.

Dr. S. Lamar Bailey of Kosciusko spoke in opposition to the motion and concurred in Dr. Arrington's remarks. Dr. McDonnial spoke in opposition to the motion and concurred in the discussions by Drs. Arrington and Simmons. Dr. Dewitt Hamrick of Corinth spoke in support of the motion, as did Dr. Martinolich. Dr. G. Swink Hicks of Natchez spoke in opposition to the motion and stated that the plan is proposing increased medical benefits.

There being no further discussion, the Speaker put the Long substitute motion which was adopted by a vote of 47 for and 24 opposed, thereby disposing of the main motion and adopting the report of the reference committee as amended.

SPECIAL ADDRESS

Dr. Francis L. Land of Washington, D. C., medical consultant on Title XIX to the Department of Health, Education, and Welfare, addressed the House of Delegates on invitation by the Board of Trustees.

REPORT OF THE SECRETARY-TREASURER

Dr. James L. Royals: Duties and Responsibilities. As an elected general officer of your association, your Secretary-Treasurer is charged with such duties as ordinarily devolve upon the secretary of a corporation by law, custom, and usage. Additionally, he is the constitutional designee as chairman of the Council on Scientific Assembly and a member *ex officio* of all councils and committees.

Membership. There was little change in membership totals for 1966 as compared with 1965. The total membership as of December 31, 1966, was 1,398 as compared to 1,414 on December 31, 1965. The 1966 total includes:

- 1,258 paid members
- 81 Emeritus members
- 59 members exempt from dues other than Emeritus

On May 1, 1967, the membership showed growth over the same date in 1966, demonstrating that the 1967 program is progressing satisfactorily. The May 1, 1967, total is 1,326 as compared with 1,285 a year previously. The 1967 total includes:

- 1,197 paid members
- 80 Emeritus members
- 49 members exempt from dues other than Emeritus

Among those exempt or excused from dues are 31 in AMA-approved residency programs, 1 in military service, 10 exempt by reason of extended illness, 1 for hardship, and 6 in associate membership status. To maintain our membership records in consonance with those of AMA, deceased members are removed from the rolls for statistical purposes after the close of the year being reported. As has been the practice, deaths are reported as soon as possible in the JOURNAL.

The association commends the following component medical societies for having secured 100 per cent of their renewable 1966 membership for the current year as of May 1, 1967:

- Amite-Wilkinson County Medical Society
- Claiborne County Medical Society
- Clarksdale and Six Counties Medical Society
- DeSoto County Medical Society
- Pearl River County Medical Society
- Prairie Medical Society

Fiscal Reporting. In accordance with usual practice, your Secretary-Treasurer submits a condensed statement of your association's fiscal condition as of April 30, 1967, as an attachment to this report. The Council on Budget and Finance has reviewed fiscal records, considered a budget for 1967-68, and has reported to the Board of Trustees in this connection. An overall budget of \$157,430.00 has been recommended and approved by the Board, and a copy of this budget is attached to the report. This amount is exclusive of funds which the association will expend in payment of professional fees under the Dependents' Medical Care Program which will be reimbursed to the association by the Department of Defense. For this purpose, we hold a capitalization, interest-free, of \$65,000, an increase of \$10,000 over last year.

MISSISSIPPI STATE MEDICAL ASSOCIATION CONDENSED STATEMENT OF FINANCIAL CONDITION APRIL 30, 1967

ASSETS

Current Assets

General Fund

Cash on deposit	\$90,373.64	
Due from Department of Defense, DMC administrative costs	1,101.00	
Due from advertisers	11,590.83	
Other receivables	514.25	
Prepaid expenses	927.24	\$104,506.96
DMC Program		
Cash on deposit, Professional account	35,760.95	
Due from Department of Defense, Professional account	29,239.05	65,000.00

Fixed Assets

Building and Equipment, less depreciation	69,854.19	
Land	13,605.30	83,459.49
Total Book Assets		\$252,966.45

LIABILITIES AND NET WORTH

Current Liabilities

Amortization, building, current year	\$ 5,113.97	
1967 AMA dues in process	350.00	
DMC program capitalization	65,000.00	\$ 70,463.97

Long Term Liabilities

Building	19,200.80
----------	-----------

Net Worth

Unappropriated net worth	163,301.68
Total Liabilities and Net Worth	\$252,966.45

Constitutional Duties. Your Secretary-Treasurer, as an *ex officio* member of all councils and committees, meets with the various official bodies of the association and sits with the Board of

HOUSE OF DELEGATES / Continued

Trustees as a general officer. Activities in connection with service as chairman of the Council on Scientific Assembly are reported separately.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The work of our Secretary-Treasurer, Dr. James L. Royals of Jackson, is deeply appreciated and we thank him for another productive year of useful effort in behalf of our association and his colleagues. He has been generous with his time and unstinting in his efforts to improve and upgrade the work of the Council on Scientific Assembly and his office. We thank him for his devotion to duties and recommend approval of his report.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON BUDGET AND FINANCE

Report of the Secretary-Treasurer and Association Operations. We have considered the fiscal portion of the Secretary-Treasurer and we have examined the operation of the association with respect to all fiscal activities, including the report of the independent certified public accountant. The findings are to the satisfaction of your council. Prior to this annual session, and during the annual session, we met for these purposes and have conferred with the Board of Trustees. We have determined that all accounts, receipts, and disbursements are regular and authorized.

Association Budget. We have considered the 1967-68 budget for operation of your association. We have conferred with the Board of Trustees who concur in our recommendations. Each item has been carefully evaluated as to necessity and adequacy. We recommend a total budget of \$157,430.00 which includes the following sums for purposes stated: (1) for general operation of all activities and departments of the association, including production of your JOURNAL, \$106,906.53; (2) for building amortization, utilities, maintenance, taxes, and associated expenditures, \$13,165.11. This amount also includes \$10,720 for the conduct of the present annual session and \$21,178.84 for reserves and contingent funds. In connection with the latter, we have deposited \$10,000 which is already drawing interest for the association. The overall budget total is exclusive of professional fee aspects of the Medicare program which is reimbursed to the association by the Department of Defense. We recommend adop-

tion of this amount as being a realistic minimum for continued effective operation of your association.

Your council points out that for each member paying state dues of \$60 per year, we will spend \$110 for association services to him in this budget. We will put aside \$8 for future services and we will hold more than \$8 for unforeseen needs to serve him further in 1967-68. This is a total of more than \$126 per dues paying member.

Insurance and Safeguards. We have examined a survey of insurance owned by the association on its physical properties and we find it adequate. Suitable safeguards for disbursement procedures, fidelity bonds, and proper safekeeping for records have been provided.

The report of the council was adopted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. Rowland B. Kennedy: Duties and Responsibilities. Your Executive Secretary is responsible for maintaining the headquarters office, for conducting the administrative affairs of the association, and for various fiduciary duties as required by Article VII of the Constitution and Section 7, Chapter VII, of the By-Laws. Your Executive Secretary reports in detail to the Board of Trustees and general officers. Because of this frequent, periodic reporting, this report is purposely brief and limited in scope.

Executive Staff. At the 98th Annual Session in 1966, the Board of Trustees stated that the executive staff was taxed to capacity and that at least two additional staff members were urgently needed. The position of Editorial Assistant in the JOURNAL Department remains unfilled, but two additional staff members have been employed to assist in meeting demands of increased activities and work loads. There are a total of nine full time staff members. The Board and general officers are conversant with staffing needs and work volume, and close coordination in this connection with the Board and officers is maintained.

The staff, in addition to performing routine, recurring administrative tasks in membership, accounting, JOURNAL production, and medical care plan administration, assists committees, councils, the Board, and general officers with supportive services. These assignments are divided between your two executives who are individually and jointly responsible for this function.

Expression of the Staff. The 1966-67 association year has seen the highest level of association activities in our history. The staff is grateful for the opportunity to serve the association and to share a small part in its progress and programs of service.

REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF OFFICERS AND
BOARD OF TRUSTEES

Your reference committee has considered the Report of the Executive Secretary in which he outlined the functions of our executive staff and the growing demands upon the staff. We commend this dedicated group of individuals for their service to our association and ask that the members of the House of Delegates join with your reference committee in fully approving the report.

The report of the reference committee was adopted.

REPORT OF THE DELEGATES TO AMA

Reporting Format. At the 98th Annual Session of the association in 1966, your Delegates to the American Medical Association revised the format of their reports to this House of Delegates, limiting the narrative and discussion to policy review. Because of the excellent reporting of AMA annual and clinical conventions through regular publications, this reporting format is again employed in accordance with the wishes of the House.

Chicago Annual Convention. The AMA House of Delegates met at Chicago during the 115th Annual Convention, June 26-30, 1966. Drs. J. P. Culpepper, Jr., of Hattiesburg and Stanley A. Hill of Corinth represented our association, Dr. George E. Twente of Jackson being unable to attend.

Major subjects considered included health legislation, billing procedures, ethics, health manpower, and remedial action for cases of discrimination against physicians because of race. One of the most spirited debates was over the proposed dues increase which was adopted. Both Mississippi Delegates, acting in accordance with Resolution No. 4, 98th Annual Session of our association, voted against the increase. The action fixed AMA annual dues at \$70 effective with the 1967 membership year.

More than a dozen reports and resolutions related directly to the then-emerging Medicare program under Public Law 89-97. The House accepted and commended a report of the Board of Trustees which outlined a policy for giving wide dissemination to information on the operational aspects of the program, methods of billing for professional services thereunder, the purpose and function of utilization review, and the advisory function of the AMA in the implementation of the law.

Of particular importance is the policy statement that "The American Medical Association opposes any program of dictation, interference or coercion, whether direct or indirect, affecting the freedom of

choice of the physician to determine for himself the extent and manner of participation or financial arrangement under which he shall provide medical care to patients under Public Law 89-97."

The House of Delegates unequivocally opposed the statutory requirement for certification and recertification of Medicare patients.

The most controversial issue in connection with Medicare was a resolution which stated that "it shall be deemed unethical for a physician to displace a hospital-based physician who is attempting to practice separate billing when said displacement is primarily designed to circumvent separate billing." Legal counsel advised against adoption of the resolution, but the House voted to adopt it. After suit was instituted by the Department of Justice against the College of American Pathologists and after the matter was explored in greater depth with the Department of Justice, the House subsequently rescinded the resolution.

In debate over a proposal to permit a physician to dispense drugs, appliances, or eyeglasses only when approved by his local and state medical societies, the House acted to encourage consultation by physicians who dispense with local medical societies where any question in this connection arises. Six resolutions dealt with the subject of discrimination against applicants for membership because of race. In lieu of the resolutions, the House directed that a change in the by-laws be prepared for consideration at the clinical convention.

In other actions, the House urged optimum use of health manpower and asked for future studies on additional training program. A new committee to study this area of interest was authorized. The Declaration of Helsinki, a guide to those engaged in clinical medical investigation with human subjects, was adopted. Opposition was again expressed against compulsory assessment of hospital staff members in raising funds for such institutions, and the Third National Congress on Medical Quackery was authorized.

The House urged state medical associations to oppose any legislation which would permit optometrists to engage in the diagnosis and treatment of disease or injury of the eye, such legislation being deemed detrimental to the public interest. The use of LSD was strongly condemned as was compulsory generic prescribing. A position of opposition to legislation similar to the Hart bill was adopted.

Las Vegas Clinical Convention. The House of Delegates was again in session during the 20th Clinical Convention of the AMA at Las Vegas, November 27-30, 1967. Education for family practice, billing and certification procedures under Public Law 89-97, revisions in the Selective Ser-

HOUSE OF DELEGATES / Continued

vice System as relates to physicians, compensation of house officers, and medical ethics were among the principal items of business and policy.

The association was represented by Drs. Culpepper and Hill, Dr. Twente being unable to attend. Dr. Charles L. Hudson of Cleveland, AMA president, urged in his address that there is a need to improve existing services and to establish new medical services for the total population of the United States. He said that "it is among the needy and formerly indigent that . . . we must show interest, initiative, and enterprise."

The formal report of the Ad Hoc Committee on Education for Family Practice, a milestone document, was presented to the House of Delegates. Dr. William E. Lotterhos of Jackson, a former chairman of the AMA Section on General Practice and now a board member of the American Academy of General Practice, served as a member of this committee.

The report, since published, urged that major effort be exerted to encourage development of new programs for education for family practice, that medical schools and teaching hospitals develop model training programs, that new sources of financial assistance for these projects be found, that recognition and status equal to those accorded other medical specialties be given family practitioners, that the practice environment for this specialty be improved, that careful study be given pre-medical education curricula in preparation for family practice, and that more medical students be thereby encouraged to enter this type of practice. In addition, a full day's hearing was conducted on the Millis Report, that of the Citizens Commission on Graduate Medical Education. This report is not yet formally before the House of Delegates.

For a second time, the House expressed disapproval of the necessity to certify and recertify Medicare patients and asked that carriers, fiscal intermediaries, and hospital associations assist in securing a repeal of this part of the law.

In a critical report of doctor-draft, the Council on National Security cited three basic flaws in the Selective Service System: (1) There is no medical group directing the allocation of physicians, (2) There is no medical group directing the priorities to be used for calling physicians to active duty, and (3) there is a need for a stronger medical voice within the Department of Defense. The report proposed that these flaws be eliminated by federal legislation establishing a National Commission on Health Resources and Medical Manpower.

Expanding on policies relating to prescription drugs, the House stated that "the present policy of the American Medical Association is that physicians should be free to prescribe drugs generically or by brand name for all of their patients, whether they are paying, Medicare, or indigent patients, the primary consideration being the best interests of the patients. Medical considerations must be paramount in the selection of drugs. In addition, the physician also has an obligation to be mindful of the economic consequences of the treatment he prescribes."

In the same vein, the House adopted a report of the Judicial Council stating that "medical considerations, not cost, must be paramount when the physician chooses a laboratory. The physician who disregards quality as the primary criterion or who chooses a laboratory because it provides him with low cost laboratory service on which he charges the patient a profit, is derelict in not acting in the best interests of his patient."

The House re-enforced its prior policy utterances on the cult of chiropractic, taking notice of the Supreme Court decision in the Louisiana case. A 1956 policy statement on admission of alcoholics to general hospitals was reaffirmed, and medical staffs and hospital administrators were asked to look upon these patients as having medical problems. Insurance companies and prepayment plans were urged to remove unrealistic limitations on the extent of coverage afforded for the treatment of alcoholism.

To clarify existing AMA policy, the House adopted an eight point statement on payment for professional medical services. The statement affirmed it proper for a physician to establish his fee with recognition of the fact that a duly constituted committee of his peers may appropriately review and pass upon the equity and justice of the charge; that it is proper for third parties to make payment in behalf of patients with recognition that the service has been rendered to the patient and that he is liable for the payment; that it is proper for a physician to work cooperatively with other physicians in a team approach to medical service with recognition that each physician is entitled to separate compensation and that the patient should clearly understand this method of charging; that it is proper for the physician who directs care by a physician-in-training be paid for his service; that a physician should not enter into a contract whereby a hospital acts as the agent for the physician unless it is with the consent of the physician and the medical staff; that physicians, collectively in hospitals, may properly establish special medical staff funds which must be wholly under their control to support and disburse as they agree;

that fees for professional medical services are properly paid only to the responsible physician and may not be appropriated by others; and that the physician is the sole arbiter as to the ways in which he may dispose of his professional income, without duress, consistent with law and medical ethics.

The House stated that compensation of hospitals for the services of interns and residents under Part 1-A of Medicare is compatible with the organization and administration of graduate medical education. The House further recommended that compensation of house officers be determined locally in accordance with state law, ethical principles, and medical policy.

The House, in other actions, expressed disapproval of the "dual fee" system in determining the rate of payment for medical services based upon the type of practice. The delegates urged continuing, vigorous effort to dissuade local officials from demanding that physicians sign compliance statements which are not required by law. The Council on Legislative Activities was asked to pursue further improvements in the Self-Employed Individuals Tax Act (Keogh act) to the point of equating benefits thereunder with those now enjoyed by corporate employees. The Bureau of the Budget was asked, through another action, to review the cost accounting system for Veterans Administration hospitals to permit comparison with cost accounting of community hospitals. Each hospital board of trustees was asked to have at least one voting member who is a doctor of medicine and who is either elected or appointed by the medical staff.

The principle of free choice of physician under Title XIX was endorsed, and collaboration among physicians, social workers, and attorneys in behalf of service for unwed mothers and their children was urged.

REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF OFFICERS AND
BOARD OF TRUSTEES

Your reference committee feels that the representation of the Mississippi State Medical Association in the House of Delegates of the AMA has been outstanding and we thank the delegates who have served us so well. We approve the reports which they have submitted to us and commend them for their service.

Your reference committee notes with deep concern the matter of the AMA group insurance program which will be at issue before the 1967 annual convention at Atlantic City. We ask that our delegates be permitted to make an expression in behalf of our association on this program, and we suggest that this House of Delegates permit

the introduction of a resolution during the adjourned meeting in this connection.

The report of the reference committee was adopted.

ANNOUNCEMENT OF THE NOMINATING
COMMITTEE

Following a recess for caucuses by association districts, the Nominating Committee was announced:

- Howard A. Nelson, Greenwood, District 1.
- James O. Gilmore, Oxford, District 2.
- J. T. Davis, Corinth, District 3.
- William E. Riecken, Jr., Kosciusko, District 4.
- William B. Wiener, Jackson, District 5.
- Prentiss F. Keyes, DeKalb, District 6.
- T. E. Ross, Jr., Hattiesburg, District 7.
- Leo J. Scanlon, Jr., Natchez, District 8.
- B. B. O'Mara, Biloxi, District 9.

Dr. O'Mara was elected chairman by the committee which conducted open sessions on May 17, 1967, and posted the nominations at the headquarters hotel on that date.

REPORT OF THE COUNCIL
ON SCIENTIFIC ASSEMBLY

Organization and Duties. The Council on Scientific Assembly is a constitutional body of the House of Delegates. It is charged with the responsibility of planning the annual sessions of the association to include all scientific activity and the programming and scheduling of annual session events. The council membership consists of the chairmen and secretaries of the several scientific sections and the secretary-treasurer of the association.

99th Annual Session. Your Council on Scientific Assembly feels that the 99th Annual Session represents a significant event in the 111 year history of the association. This meeting marks the third consecutive year that the association has met under the revised format of general scientific sessions approved by the House of Delegates in 1964. Your council has profited from this prior experience and believes that this annual session's program represents a full implementation of the House of Delegates' intent.

In addition to arranging the scientific program to the extent possible to avoid simultaneous sessions, your council has also scheduled business meetings, including reference committee hearings, so that they do not conflict with the formal scientific program. This latter innovation was initiated at last year's annual meeting, and your council is happy to report that there was a noticeable increase in attendance at reference committee meet-

(Turn to page 516)



The President Speaking

'Usual and Customary'

TEMPLE AINSWORTH, M.D.

Jackson, Mississippi

TWENTY-NINE TITLE XIX programs in United States jurisdictions were fully operational in July. All but nine states of the remaining 25 jurisdictions are in varying degrees of implementation at the executive or legislative levels. Mississippi is one of the nine.

The House of Delegates at the 99th Annual Session wrote the full and final policy chapter on Title XIX from the physician's viewpoint with an expression of full approval for enactment and implementation of a medically-oriented Title XIX program for the state. The 1968 regular session of the Legislature will have the opportunity—the one last opportunity before the January 1, 1970, deadline—for establishing this program for the needy under criteria written and administered by the state of Mississippi.

In offering leadership for this task, the state medical association will be guided by its six point positive policy approved by the House of Delegates on Title XIX. But in addition, Mississippi can also be guided by the experience of other states where the program has been developed, and one such experience is in the area of physician compensation for professional services rendered.

Sixteen of the 29 states with operational Title XIX programs pay physicians on a usual and customary fee basis. Four other states, Connecticut, Hawaii, New York, and Ohio, are in the final stages of arriving at this arrangement. Four jurisdictions, Kentucky, Guam, Puerto Rico, and the Virgin Islands, have fixed fee schedules, but in the case of the three territories, two have usual and customary fee approval with transitions in progress from Public Health to private physicians.

The time to discuss this with your legislator-candidate is now, because it is just as important for the state to meet its responsibilities in Title XIX as it is for physicians. ★★★



The Price of People: Crucial Quantity in Hospital Costs

I

THE COST OF HOSPITAL CARE in the United States is the most serious and disturbing aspect in the complex proposition of financing medical services. It is an economic balloon, caught in the updraft winds of mounting wages, higher priced goods and services, costlier buildings, and inflation. It is irrationally penalized under the same laws of economic behavior which exert a much less damaging impact upon industry. And the outlook for stabilization and leveling off is grimly pessimistic. In short, the cost of hospital care seems to have only one place to go—up and away.

Beneath all the learned, scholarly analyses by the health care cost economists and somewhere behind all the charts, graphs, and mountains of statistics lies the astonishingly simple explanation: Hospital services are personal services provided by human beings to other human beings. Where personal service, individual judgment, and human response are required and demanded, the wage compensation factor becomes predominant as an economic aspect of the service. In addition, this factor weighs heavier upon the entire cost equation when wages paid must not only be brought into a focus of equity in the labor market but also brought upward from a substandard level where they have historically reposed.

It is bitter irony that the night club dancer earns more than the medical technologist, that the beer salesman is better paid than the chief of nursing, that the Las Vegas blackjack dealer takes home a

bigger wage than the physical therapist.

As difficult and perplexing as the hospital cost problem is, there is substantial reason to believe that Americans have unobtrusively adopted a convenient system of double values under which they are cheerfully willing to pay for life's pleasures and patently reluctant to shell out for life itself.

II

Economists identify hospitals as "labor intensive" organizations. About two-thirds of every dollar received by hospitals goes out in wages and salaries. Unlike business and industry, personal services are required around the clock in a hospital each day of the year. There is a low and abrupt cutoff point in hospitals beyond which automation is virtually useless; industry is finding new machines to replace the man every day.

Two decades ago, a hospital employed a worker and a half for every patient it served. Today, the ratio is three-to-one. There is a parallel in the entire American system of health care: In 1940, there were five health workers for each physician; in 1950, there were seven; and in 1960, there were 11 such individuals for each doctor. Today there are 13 health workers for each physician, and by 1970, there will be a ratio of 17-to-1 by every reliable indicator.

In just two years, from mid-1965 through the first half of 1967, the number of nurses employed in U. S. short term, nongovernmental hospitals rose from 277,000 to 308,000 and all other hos-

pital-employed personnel rose from about 1.5 million workers to 1.77 million. Naturally, the mean annual wage zoomed to \$5,140 from \$4,072, and this was harshly reflected in the mean salary expense per patient day: This went from about \$27.50 in 1965 to \$37 in 1967.

But during the same two year period, the mean daily census rose only slightly, to 588,000 from 563,000.

Two primary factors have accounted for the sharp upturn in hospital payroll costs in the past 12 months. First came the new federal minimum wage laws and second, concerted action by nurses, both in their association-sponsored "economic security" demands for annual compensation of \$6,500 and in the "strikes" calculated to dramatize these demands. As a direct consequence, hospital salary levels have increased from 20 to 40 per cent nationwide.

III

The costs of all goods and services which Americans must have are moving upward as is disposable personal income, a quaint way by which the economists describe what we have left after the tax bite. This is also true of all medical, hospital, and health care services. From 1950 to 1965, expenditures for all medical care services in the United States rose from about \$13 billion to nearly \$37 billion, an increase of 186 per cent. During the same period, the population rose 26 per cent, so a fourth more people were demanding more health care services at a higher price.

In this same decade and a half, the per capita expenditure for all health care services rose from \$85 to \$194, an increase of 128 per cent in per person outlay. But the clincher is this: In the same period, *hospital costs rose 230 per cent.*

Another series of yardsticks by which to measure this upsurge is also noteworthy. In this 15 year period, hospital costs per admission rose from \$127 to \$320. The cost per patient day went from \$16 to \$45. The total expenditure for all medical care costs in 1950 was 4.5 per cent of the gross national product, the net worth of all goods and services created in a year. By 1965, all such costs amounted to 5.8 per cent of the GNP. But during the same period, hospital costs went from 1.35 per cent of the annual GNP to 2.02 per cent.

So while all medical and health care costs rose 29 per cent of its share of the GNP in 15 years, hospital costs rose 50 per cent. This is the price of people.

As if the critical examination of hospital cost increases were not technical enough, there are even more technical reasons underlying these economic phenomena. In comparison with industry, any "labor intensive" organization is particularly vulnerable to the impact of wages.

In the first place, industry is geared to absorb most or all of the effects of wage increases by concomitant increases in productivity. This is not true of hospitals where personal services can be automated only to a limited extent.


Second, the impact of wage increases on hospital costs is much greater than the effect of equal increases on the costs of industry. As a hard economic fact, the same percentage of increase in hourly wage rates in hospitals and comparable dollar-volume industries can and does have double the effect on the hospital over the profit-incentive business, and here's why.

In business and industry, payroll usually constitutes about 26 per cent of overall production costs. In the hospital, it is about 62 per cent. So the two year increase in hospital payroll costs of about 24 per cent multiplied by the total share which the hospital puts into payroll, that's $24 \times .62$, results in an overall increase of 14.88 per cent. On the other hand, an industrial payroll increase of 24 per cent multiplied by the total payroll



Copyright 1967, Mississippi State Medical Association

"To hell with Medicare!"



Anxiety and tension stemming from organic illness may undermine your patient's cooperation and possibly retard success of primary therapy.

If his emotional symptoms persist in the face of your counsel and reassurance, you may want to consider adjunctive use of SERAX (oxazepam). It is indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression. May be used in a broad range of patients, usually with considerable dosage flexibility.

When prescribing, carefully observe dosage recommendations and appropriate precautions, especially as pertaining to the elderly and when complications could ensue from a fall in blood pressure. (See Wyeth literature or PDR as well as "IN BRIEF" below.)

IN BRIEF.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures.

Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leucopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax[®]
(oxazepam)



Wyeth Laboratories
Philadelphia, Pa.

share, that's $24 \times .26$, results in an overall costs increase of 6.24 per cent.

In the health care field, the costs hit where it hurts.

V

There is another side of the coin which, in all fairness, ought to be flipped over and examined. Hospitals have generally done a good job of telling their costs story and in keeping prepayment and insurance organizations acutely aware of their plight. Generally, physicians have been much more reluctant to explain the rising costs of medical practice, and the results have, in many cases, been all too clear.

Perhaps the best example of this open information policy by hospitals has been with Blue Cross. Almost without notable lag, Blue Cross dues and benefits have risen to meet the upward movement of hospital costs. Hospital associations hammer their cost story out in committee hearings in legislatures and in the Congress. While sometimes accused of harsh policies with reference to patients' responsibilities for paying the bill, hospitals have been sternly realistic about money problems. On the plus side, it can be said that they have stayed in business, kept the doors open to the ill and injured, and met the demand for upgraded services and the challenge of changing technology in caring for the patient.

With a per patient day cost of nearly \$60 in sight during 1967 and the sky-bound momentum holding steady, the future of hospital costs is a subject for debate and speculation. There is no reason to disbelieve the few experts who say that it will be close to \$100 per patient day 10 years hence. But with all the rational and technical explanations for the valid reasons underlying these phenomena, there must, at some point in time, come a stabilized economic environment for the hospital. The alternative is for it to price itself unwittingly and involuntarily out of the health care picture as a private institution, because there is a bottom to the bucket just as surely as there is a limit to its sky.

The medical profession can and is playing a critically important role in this succession of events, because it must identify its capacity and capability with that of the hospital in rendering the best medical care. Understanding, candid liaison, frank and open interchange, and practical innovation are among those things which will help all members of the health care team meet this issue effectively. It must be met, too, because a

big slice of the future is riding on it, and the alternative of failure is a specter nobody wants to contemplate.—R.B.K.

STP—Sure Route for a Bad Trip

Most people believe that STP is a crankcase oil additive calculated to make the old heap purr with new power like a *grand prix* road machine. More recently, the familiar initials are identified with a new and powerful hallucinogenic compound which outdoes LSD hands down.

While the genesis of the designation, STP, is not clear, some believe that it may be a takeoff on the Studebaker Corporation's oil additive which is an abbreviation for the prosaic designation, "scientifically treated petroleum." But there's nothing prosaic about this weird member of the piperidyl benzilate group. The compound was developed by Lakeside Laboratories of Milwaukee in 1965 and initially tagged JB-314 in the research laboratory. Like LSD, it is easily and inexpensively made.

The authorities report that STP acts on the parasympathetic nervous system, producing profound alterations in the state of consciousness. Unlike the relatively short-acting LSD, the newer



Copyright 1967, Mississippi State Medical Association

"Wow! If you don't look like Sophia Loren, then my name isn't Charles DeGaulle!"



**Jefferson House
Convalescent Center**

represents a new approach to medical care. Why? Because Jefferson House is a *convalescent center*—one of the first such institutions in the South—especially designed, equipped, and staffed to provide active restorative care for the convalescing patient, the individual on the road to recovery.

If you have a patient who's between hospital and home, look into Jefferson House. Write the Director, 1800 Jefferson Highway, New Orleans, Louisiana 70121.



hallucinogen may last for days following a single dose. Some of the ataractic agents which are useful in arresting and dissipating the effects of LSD actually potentiate STP, the authorities continue. In fact, it's a safe bet that any trip on STP is a bad one.

At a recent San Francisco "love-in," there was reportedly a widespread use of STP with unpleasant consequences for the jazzed-up hippies who experimented with it. Almost a score were admitted to hospitals in varying states of drug intoxication ranging from gastrointestinal distress to severe mental distortion and psychoses. One death in California has been formally attributed to STP usage. Physicians there report that the best initial treatment for the condition is counteraction of the nervous system depression.

The growing use of hallucinogens and the toleration of the free-mind cults promoting their use are substantial medical, social, and legal problems. It is imperative that new and urgent emphasis be placed on public education of the folly and danger of using any such agent. The psychiatrists have warned us: Use of these deadly drugs cannot possibly result in any gain, and the user risks the loss of his mind. It's a message worth repeating.—R.B.K.

Doctors Agree— Moonshine Kills

"Doctors agree—moonshine kills." So states a catchy four word message which the Medical Association of Georgia has literally plastered all over the state, and the campaign has paid off handsome dividends.

Concerned over the very real health hazards implicit in the ingestion of lead salts in the home-made booze, MAG leaders devised their program, filling the airwaves, billboards, newspapers, and every available communications medium with their medical injunction. Interestingly enough, the campaign, for all intent and purpose, is morally neutral and carefully pitched to stay out of the booze-or-no-booze debate. The Georgia physicians are interested in educating the public about the dangers of moonshine.

Despite legalized liquor, the moonshiner flourishes almost everywhere. The Treasury Department has its Alcohol and Tobacco Tax Units in every state, and its chief task is seeking out and putting the axe to the illicit stills. The ATU's

have little difficulty staying busy, because the old, established occupation of moonshining continues to be a major industry in this drink-loving nation.

The Georgia campaign is a notable example of practical preventive medicine and medical iMAGination at work.—R.B.K.

New York Bank Surveys Care Costs

The cost of medical services, which went up about 10 per cent in a recent nine-month period, is likely to continue rising, says an article in the May issue of *The Morgan Guaranty Survey*.

The bank publication cites greatly increased demand for medical care as the key factor in the long-term upward trend of health service prices. Demand has been stimulated, the survey notes, by expansion over the years of philanthropic and public-assistance programs that provide minimal-cost medical care, by the growth of health-insurance coverage, and, most recently, by the Medicare and Title XIX programs.

The "enormous" growth in demand for medical services has occurred, the article says, in the face of "many stubborn obstacles to the rapid expansion of supply." The health industry already employs more people than the steel, automobile, and aircraft industries combined, but there is a "chronic shortage" of medical personnel, both professional and non-professional.

The number of students receiving medical degrees is expected to increase from 7,400 in 1965 to 10,000 in 1975, the survey reports, and there probably will be an even sharper acceleration in the training of nurses and allied health workers. "Even with intensified training efforts, however," it continues, "there still can be relatively little confidence that the complement of medical and related personnel will be numerous enough any time soon to relieve the pressures of demand."

About four-fifths of the U. S. civilian population is now covered by some form of medical-care insurance, the article notes, compared with less than one-tenth before World War II. "The evidence is overwhelming," it says, "that people who have health insurance make appreciably more use of medical services than people who have no coverage."

The sharpest rise in medical service costs has come since introduction of the Medicare and Title XIX programs, beginning at mid-1966. In the nine months ending last March, according to the Bureau of Labor Statistics, the prices of all medical services rose at an annual rate of 10 per cent.



POSTGRADUATE CALENDAR

THE THYROID AND RELATED PROBLEMS

University Medical Center, Jackson
September 12, 1967, beginning at 9 a.m.

A faculty of 12 will review the anatomy, physiology, and pathology of the thyroid gland; discuss medical and surgical aspects of hyperthyroidism and hyperparathyroidism; the relation of thyroid function to problems in gynecology and pregnancy; and surgical and radiological considerations in the management of thyroid tumors.

CURRENT PRACTICES IN THE MANAGEMENT OF BILIARY TRACT PROBLEMS

University Medical Center, Jackson
September 22, 1967, beginning at 9:30 a.m.

Morning

DIAGNOSIS AND MANAGEMENT OF THE JAUNDICED INFANT

Jim G. Hendrick, M.D.

A PRACTICAL APPROACH TO THE DIFFERENTIAL DIAGNOSIS OF JAUNDICE IN ADULTS

S. L. Stephenson, Jr., M.D.

REFINEMENT IN THE MANAGEMENT OF SOME MAJOR BILIARY TRACT PROBLEMS

Frank Glenn, M.D., Professor of Surgery,
Cornell University

BASIC PRINCIPLES IN INTERPRETING THE CHOL- ANGIOGRAM

Robert D. Sloan, M.D.

PERCUTANEOUS CHOLANGIOGRAPHY

Carlos M. Chavez, M.D.

ANATOMICAL VARIATIONS WHICH PREDISPOSE TO TECHNICAL MISHAPS DURING GALLBLADDER SURGERY

W. O. Barnett, M.D.

Afternoon

IMPORTANT PRINCIPLES IN THE DIAGNOSIS AND MANAGEMENT OF CHOLEDOCHOLITHIASIS

Frank Glenn, M.D.

IMMEDIATE MANAGEMENT OF OPERATIVE ER- RORS DURING BILIARY TRACT SURGERY

J. Harvey Johnston, Jr., M.D.

MANAGEMENT OF COMMON DUCT STRICTURES

James D. Hardy, M.D.

THE MANAGEMENT OF AMPULLA OF VATER LE- SIONS WHICH RELATE TO THE BILIARY TRACT

J. Harold Conn, M.D.

THE MANAGEMENT OF PANCREATITIS SECONDARY TO BILIARY TRACT DISEASE

Albert L. Meena, M.D.

BILIARY-ENTERIC FISTULAE

Rush E. Netterville, M.D.

FUTURE CALENDAR

October 12-14

ARTHRITIS SEMINAR

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRACTICE

October 27

SEMINAR FOR NURSE ANESTHETISTS

November 10

SYMPOSIUM ON HAND INJURIES

November 30

DIAGNOSIS AND MANAGEMENT OF THE ANE- MIC PATIENT

December 8

CARDIOPULMONARY RESUSCITATION

December 14

MODERN MANAGEMENT OF COMMON OB- STETRICAL COMPLICATIONS

January 5

OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE

January 25

ALIMENTARY TRACT PROBLEMS

February 1

UMC DAY

February 15

CLINICAL NEUROLOGY

March 1

SEMINAR ON RENAL DISEASES

March 14-15

MEDICINE AND RELIGION

March 27-29

CARDIOVASCULAR SEMINAR

April 11

DIABETES SEMINAR



PERSONALS

WILLIAM O. BARNETT of Jackson has been elected to fellowship in the American Surgical Association. He is professor of surgery at the University Medical Center, and his election to ASA fellowship brings to three the number of Mississippi surgeons in the association.

BLAIR E. BATSON of Jackson has been elected to the American Pediatrics Society, according him high honor in academic pediatrics. He is professor and chairman of the Department of Pediatrics at the University Medical Center.

MAXWELL D. BERMAN of Jackson recently addressed the Jackson Medical Assistants, a chartered affiliate of the American Association of Medical Assistants.

WILLIAM B. BOBO of Clarksdale has announced the removal of his offices to 2001-7th Avenue. His practice is limited to internal medicine.

ROBERT H. BOSTWICK, JR., of New Albany has been elected president of the Union County Medical Society, an informal component of the North Mississippi Medical Society. Other officers are JAMES L. THORNTON, vice president, and EDDIE E. BRAMLITT, secretary-treasurer, also of New Albany.

WARREN C. FULTON of Aberdeen has announced the association of EUGENE R. DEGIORGIO in general practice. Dr. DeGiorgio received his medical degree at Loyola University School of Medicine, Chicago, and his postgraduate training at St. Francis Hospital, Evanston, Ill., and UCLA where he received further training in anesthesiology.

RICHARD T. FURR of Ocean Springs has announced the association of FRANK G. GARBIN in practice with offices at 1800 Government Street. Dr. Garbin was graduated from the University of Tennessee College of Medicine. He received his postgraduate training in Kentucky and has spent four years in Santurce, Puerto Rico.

DEWITT HAMRICK of Corinth has been re-elected secretary-treasurer of the Tombigbee River Valley Water Management District board of directors. Dr. Hamrick is also a member of the Mississippi State Board of Health.

DEWEY H. LANE, JR., of Pascagoula has been elected to the board of directors of the Jackson County Mental Health Association.

Tandearil® oxyphenbutazone

Tandearil in Painful Shoulder

Therapeutic Effects: Stiffness and pain may diminish within 2 days, and full mobility may be restored within a week. These effects are obtained with oxyphenbutazone alone or combined with physiotherapy or local hormonal injections. The drug is usually well tolerated and does not affect pituitary-adrenal function or immune response.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Painful Shoulder: 600 mg. daily in divided doses for 2 to 3 days; 300 mg. daily thereafter. Usual duration of therapy: 2 to 7 days.

Availability: Tablets of 100 mg. 6562-VI(B)R

For complete details, please refer to full prescribing information.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

ALBERT RAY LEE, JR., has announced the opening of his offices at Liberty, Miss., for the general practice of medicine. He was formerly located in the Pearl community in Rankin County near Jackson.

RAY F. MOTLEY of Laurel has been elected president of the Jones County Unit of the American Cancer Society, Mississippi Division. During 1966-67, he served as local Crusade chairman, raising more than \$7,200 in his county for the society.

G. T. SHEFFIELD of the Woolmarket community near Gulfport was honored by the Harrison County Board of Supervisors who named a county road for him. The road is more than one-half mile long and has a right-of-way 40 feet wide. The action of the supervisors noted that Dr. Sheffield had deeded the county 20 feet of the right-of-way so that the road might meet minimum standards for public maintenance. He is an Emeritus member of the association and has two sons, JAMES A. SHEFFIELD of Handsboro, a physician, and T. E. SHEFFIELD of Biloxi, a dentist.

GERALD WESSLER of Gulfport has been appointed assistant clinical visiting professor of urology at the Tulane University School of Medicine at New Orleans. He has practiced his specialty at Gulfport since 1951 and is past president of both the Coast Counties Medical Society and the Mississippi Urological Association.

RICHARD L. YELVERTON of Jackson has announced the opening of his offices in the Medical Tower at 440 E. Woodrow Wilson Drive. His practice is limited to general and thoracic surgery.


USM Sponsors Smoking—Health Meet

A landmark meeting on smoking and health for young people was conducted at Hattiesburg under the joint sponsorship of the University of Southern Mississippi, the State Board of Health, State Department of Education, and the U. S. Public Health Service's National Clearinghouse for Smoking.


Featured speaker was Dr. Alton Ochsner of New Orleans. Also appearing were Bill Wade, famous NFL quarterback and leader in the Association of Christian Athletes, and Dr. Arthur C. Guyton of Jackson, who has conducted investigations at UMC on the effects of smoking on the cardiovascular system.



DEATHS

 MCILWAIN, STOVA B., Pascagoula. M.D., Mississippi College of Medicine, Meridian, Miss., 1911; interned New York Polyclinic Medical School and Hospital; member Southern Medical Association, Gulf Coast Clinical Society, past President Coast Counties Medical Society, and the MSMA Fifty Year Club; died June 6, 1967, aged 80.

THORNE, EDWARD A., Holly Springs. M.D., University of Louisville School of Medicine, Ky., 1932; post graduate, Vanderbilt University, Nashville, Tenn.; died June 6, 1967, aged 60.

 TRAPP, IRVIN B., Port Gibson. M.D., University of Oklahoma School of Medicine, Oklahoma City, Okla., 1929; interned Fifth Avenue Hospital, New York, N. Y.; post graduate Harvard Medical School, Boston, Mass.; died June 20, 1967, aged 71.

Diabetes Association Names New President

Dr. Edwin W. Gates, of Niagara Falls, N. Y., became President of the American Diabetes Association at its Twenty-seventh Annual Meeting in Atlantic City, N. J. Dr. Gates has been active in the Association since 1953. He has served as a member of its Board of Directors since 1955.

Elected Treasurer of the Association in 1961, he held that office for four terms before becoming Vice President in 1965. The Association chose Dr. Gates as its President-Elect at its Twenty-sixth Annual Meeting last year.

Dr. Gates is a native of Nashua, New Hampshire. He earned his B.S. degree at Colby College, where he was elected to Phi Beta Kappa. After receiving his M.D. from Harvard Medical School in 1926, he served as intern and resident for three years at U. S. Marine Hospital, Staten Island, N. Y.

Dr. Gates was among the first to discover that the incidence of diabetes in the United States was much higher than had generally been believed. At Niagara Falls Memorial Hospital he organized a continuous general medical audit which has since become a model for similar systems in many other hospitals.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 26-29, 1967, Houston, Texas; Annual Convention, June 16-20, 1968, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

American Academy of General Practice, Sept. 18-21, 1967, Dallas, Texas. Mr. Mac F. Cahal, Executive Director, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

American College of Surgeons, Annual Congress, Oct. 2-6, 1967, Chicago, Ill. John P. North, Director, 55 E. Erie St., Chicago, Ill. 60611.

Southern Medical Association, Nov. 13-16, 1967, Miami Beach, Fla. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

American College of Obstetrics and Gynecology, District VII, Oct. 19-21, 1967, Jackson, Miss. William S. Cook, Chairman, 500-C E. Woodrow Wilson Dr., Jackson 39216.

STATE AND LOCAL

Mississippi State Medical Association, 100th Annual Session, May 13-16, 1968, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Mississippi Academy of General Practice, Annual Meeting, Oct. 17-19, 1967, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September, and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box L, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.



Book Reviews

Current Concepts in Ophthalmology. By Bernard Becker, M.D., Professor and Chairman, Department of Ophthalmology, Washington University School of Medicine; and Robert C. Drews, M.D., Assistant Professor of Clinical Ophthalmology, Washington University School of Medicine. 265 pages with illustrations. St. Louis: The C. V. Mosby Company, 1967. \$17.25.

The authors, in the preface, limit the scope of this book to a compilation of selected topics representing some of the current clinical work and interests of the staff of the Washington University Ophthalmology Department. Altogether there are 20 authors, with Drs. Becker and Drews accounting for about one third of the text. The book is slanted to the practicing ophthalmologists, but its direct and concise text can be understood by the medical student, or in the appropriate areas, the ophthalmic technician.

Sensory adaptation in concomitant strabismus by Dr. Charles E. Windsor emphasizes recent work on anomalous retinal correspondence. Dr. George Bresnick summarizes the pros and cons of diabetic retinopathy (degree of diabetic control versus speed of development of retinopathy) with an excellent selection of diabetic microangiopathy—genetic considerations. Dr. Edward Okun takes a ten year look at photocoagulation with discussion of these diseases probably better treated by the “older methods.” Dr. Steven M. Podos summarizes primarily in tabular form, the ophthalmic manifestations of inherited metabolic diseases.

Likewise, there are chapters devoted to steroid therapy in postcataract enophthalmitis, rubella virus and the congenital rubella syndrome, blow-out fractures of the orbital floor, and homocystinuria.

Dr. Jack Hartstein reports his work on astigmatism induced by corneal contact lenses (astigmatism which does not disappear after discontinuing the lens), with a standardized followup routine to ferret out these cases. His continuing work further emphasizes the importance of all contact lens wearers being followed by ophthalmologists irrespective of whether they were “fit” by a physician.

The authors recommend this book for reading

at leisure, with the goal of provoking the reader to think, or to promote investigation. I believe they achieved another purpose; that of providing a source of technical information in those areas of clinical ophthalmology primarily dominated by multiple and varied types of new instrumentation. These areas include tonography, applanation tonometry, cryogenic therapy, plantaris tendon transplant, and ophthalmodynamography. Here the discussions of the background, concepts, basic theory, clinical applications (and limitations) are excellent. For the ophthalmologist setting up such facilities there is a good, practical “cook book” approach to the actual mechanics of the involved method. Additionally, there is a detailed description of the various instruments available, with instructions on instrument maintenance and precautions. There are many photographs and diagrams.

The book is well indexed, with a bibliography at the end of each chapter. The entire presentation is remarkably uniform, undoubtedly reflecting the experienced and firm editorial hand of Dr. Becker.

This book is recommended reading as a stimulating current coverage of the subjects discussed. For the ophthalmologist embarking on any of the “dominated by new instrumentation” fields, the book is a must.

SAMUEL B. JOHNSON, M.D.

Clinical Pathology: Interpretation and Application. By Benjamin B. Wells, M.D. and James A. Halsted, M.D. 708 pages with illustrations. Philadelphia: W. B. Saunders Company, 1967. \$11.50.

The authors have written a book intended to serve as a guide in correlating laboratory data and clinical status, both normal and abnormal. Their stated purpose was to give physicians “. . . a broad appreciation of the clinical laboratory as a major modality for the diagnosis and treatment of disease in order to do their jobs effectively.” They have succeeded well in this, primarily through their organization of the book into sections about clinical syndromes with their attendant laboratory findings, rather than the usual reversed listings under the various subsections of the clinical lab-

oratory. This approach assumes a prior knowledge of clinical medicine but makes for a more readable book for anyone with the time or inclination to read from page one to the end of the book. Of even greater value, it makes available rapidly obtainable information as regards laboratory procedures and their interpretation relating to specific disease states.

The authors have wisely chosen to limit their discussions primarily to procedures available to the practicing physician and to procedures of proven reliability and value in diagnosing and managing patient's diseases rather than including the multitude of procedures which properly belong in research laboratories. They mention new procedures and trends in laboratory medicine with their possible applications in the future without burdening the reader with a mass of detail.

The specific mechanics of laboratory procedures are limited to a special section at the end of the book leaving the preceding chapters free of the details of specific laboratory test.

This concise, and relatively short book, fills a longstanding void in the clinical interpretation and application of laboratory findings and should prove useful to both clinician and pathologist.

ALLEN M. READ, M.D.

MAMA President Asks M.D. Support

An appeal to state physicians to support the Mississippi Association of Medical Assistants has been made by Mrs. Nancy Varnado of Jackson, president of the statewide group. She is also executive secretary of the Central Medical Society, the state association's largest component body.

In an open letter to Mississippi physicians, Mrs. Varnado said that "as a physician, you are aware of the importance of having capable medical assistants in your office. The more competent assistant saves you valuable time and helps you give better service to your patients."

The president described the primary purpose of the medical assistants association as helping the individual doctor's girl Friday increase her knowledge and become a better helper to her physician-employer. Mrs. Varnado emphasized that the Mississippi Association of Medical Assistants, a non-profit organization, is not now nor will ever become a trade union or collective bargaining agency.

The Mississippi association is a chartered affiliate of the American Association of Medical Assistants which was founded in 1956. It boasts the approval and endorsement of the American Medical Association.

The Mississippi group was organized in 1964 and has the endorsement and sanction of the Mississippi State Medical Association.

In her open letter, Mrs. Varnado urged physicians to encourage interest in the AAMA program on behalf of their office staffs. Membership benefits available, she said, include a comprehensive group insurance program in addition to the continuing education program for improving the medical assistant's skills and knowledge.

Many state physicians work with the assistants group in advisory and instructional capacities.

AHA Sets San Francisco Meet

Six sessions on clinical cardiology of interest to practicing physicians and simultaneous programs on various aspects of cardiovascular research have been scheduled for the American Heart Association's 40th annual Scientific Sessions. The three-day meeting will be held from Oct. 20-22 in San Francisco's Civic Auditorium.

Highlighting the clinical cardiology program will be papers on clinical investigations, lectures, panels and symposia. Featured will be the first delivery of the association's International Lecture, established on the occasion of Dr. Paul Dudley White's 80th birthday last year. The initial presentation, honoring the Boston cardiologist for his leadership in advancing cardiology, will be made by Gunnar Biorck of Stockholm's Karolinska Institute on the subject, "Biology of Myocardial Infarction."

The concurrent scientific sessions, planned by the association's nine scientific councils, include six programs on cardiovascular surgery and reports of original studies in other subspecialties of cardiovascular research and medicine.

A series of cardiovascular conferences for small group discussions are scheduled for Saturday evening, Oct. 21. Recently-produced cardiovascular films will be shown all-day Sunday, Oct. 22. Scientific and industrial exhibits will be on display throughout the sessions.

Forms to register for the meeting, which include hotel reservation requests, and further information may be obtained through local Heart Associations or the AHA National Office, 44 East 23rd Street, New York, N. Y. 10010.



NIH Approves Mississippi Regional Medical Program and Funds \$322,800

A grant of \$322,845 from the Regional Medical Program Division, National Institutes of Health, will finance the first year's planning activities of the newly established Mississippi Regional Medical Program. Headquartered at the applicant institution, the University of Mississippi Medical Center, the program will have Dr. Guy D. Campbell as coordinator. The region will coincide with state boundaries.

Local initiative will be the hallmark of the Mississippi Regional Medical Program. In commenting on the grant award, Dr. Robert E. Carter,



Dr. Guy D. Campbell, coordinator of the Mississippi Regional Medical Program, left, discusses the recently awarded planning grant of \$322,800 with UMC Dean Robert E. Carter.

medical center director and dean, said, "Plans and decisions will be made at the community level in a working partnership among the state's physicians, other members of the health team, and the medical center."

Dr. Carter praised the interest and help of the

State Board of Health, the Mississippi State Medical Association, Mississippi Hospital Association, other professional health organizations, and voluntary health agencies as key factors in the state's successful bid for a Regional Medical Program.

In common with Regional Medical Programs elsewhere in the nation, the Mississippi program will be designed to meet needs and circumstances within the region. Broad goal is to reduce the gap between the potentialities of medical science and the realities of existing facilities and services.

As outlined in the grant application, submitted in December, Mississippi Regional Medical Program planning will begin with an assessment of the present situation pertaining to heart disease, cancer, stroke, and related diseases in this state.

The resultant "profile" will disclose areas of need and proposals for their relief will be invited. Dr. Campbell stresses that all physicians, other health professionals, participating institutions, and members of consumer groups will be encouraged to recommend methods for correcting health deficits. Final decisions will involve the cumulative judgment of appropriate planning committees, a Regional Advisory Group representative of professional and public interests and of geographic areas, and the medical center administration.

Doctor-community-medical center cooperation has characterized the Mississippi program from its earliest preplanning stages.

In November, 1965, the Mississippi Heart Association invited interested organizations to the medical center to discuss the report of the President's Commission on Heart Disease, Cancer, and Stroke and the provisions of the newly enacted Regional Medical Programs bill. The preplanning committee continued to meet during 1966 with Dr. L. T. Carl of Jackson representing the Mississippi State Medical Association.

Preliminary to submitting its planning grant application, the applicant institution designated a Regional Advisory Group which included: Congressman G. V. Montgomery, representing the Mississippi Heart Association; Joe Carson of Meridian

ORGANIZATION / Continued

and Dr. Richard G. Burman of Gulfport, Mississippi Division, American Cancer Society; Dr. James L. Royals of Jackson, the new representative of the state medical association; Dr. Alton B. Cobb of Jackson, Mississippi State Board of Health; Dr. Robert E. Carter, University Medical Center; and Dr. Cyril Walwyn of Yazoo City, Mississippi Medical and Surgical Association.

S. D. Craig of Jackson, Mississippi Farm Bureau; Charles Flynn of Jackson, Mississippi Hospital Association; Miss Flora Bain of Hattiesburg, Mississippi Nurses Association; James T. Connor, Jr., of Canton and James E. Fowler of Jackson, nominees of the State and Jackson Chambers of Commerce; Mrs. Helen Monroe of Mississippi Valley College, Itta Bena; Dr. John A. Peoples, Jr., Jackson State College, Jackson; Walter Washington, Utica Junior College, Utica; Mrs. A. A. Raymond of Biloxi, W. O. Stanley of Jackson, and Dr. F. C. Flewellen, Jr., Mississippi State University, all designated to represent a wide spectrum of consumer and professional groups.

A subsequent appointment added Dr. Julius Ratliff of Jackson, representing the Mississippi Dental Association.

The MRMP organizational structure calls for creation of a 10 to 15-member planning committee to include the regional and categorical coordinators, chairmen of the categorical subcommittees, and other members with special competence in the areas. Executive directors of the appropriate voluntary health organizations will be asked to serve on the categorical subcommittees along with some 10 other members appointed for their knowledge in the field with due regard to geographic and ethnic distribution.

Physicians throughout the state will be kept fully informed on all steps in the developing programs so they may make meaningful contributions to its direction of growth.

MSMA Names Regional Medical Program Member

Dr. James L. Royals of Jackson has been named to represent the state medical association in the Regional Medical Program for Mississippi. He joins the Regional Advisory Group which will assist in the development and direction of the UMC-based program.

The former association secretary-treasurer and chairman of the Council on Scientific Assembly

was named to the key post by Dr. Temple Ainsworth of Jackson, state medical association president.

The Regional Medical Program is also popularly known as the heart disease, cancer, and stroke program. It is administered by a special division of the National Institutes of Health headed by former UMC dean Robert Q. Marston.

Concurrently with the announcement of Dr. Royals' appointment by Dr. Ainsworth, the coordinator of the Mississippi program, Dr. Guy D. Campbell of Jackson, announced that NIH had approved the University Medical Center's planning grant application. A sum of more than \$322,000 has been allocated for the first year.

Also represented on the Regional Advisory Group are dental, hospital, nursing, and allied professional organizations in addition to voluntary health associations and the public at large through civic groups.

Dr. Royals succeeds Dr. L. T. Carl of Jackson, the initial appointee representing the medical profession.

ECF Deposits Not Required, Says SSA

Medicare beneficiaries who enter extended care facilities following hospitalization should not be required to pay deposits as prepayment for services, Deputy Commissioner of Social Security Arthur E. Hess said.

Hess was responding to reports that extended care facilities in a few areas are requiring medicare beneficiaries to advance deposits amounting to as much as \$300 or \$400 in some instances before they can be admitted.

Medicare pays all covered costs for 20 days of a posthospital stay in an extended care facility, but the beneficiary is responsible for a \$5 a day coinsurance payment for the 21st through the 100th day. Some facilities have said that the deposit, required upon admission, is to cover the \$5 a day coinsurance payment should the patient stay more than 20 days. Others have claimed that it is customary to charge patients a deposit before admittance to protect facilities against a loss.

There is no justification, the Social Security Administration believes, for an extended care facility to require prepayment of this \$5 a day as a condition of admission. Participating extended care facilities, Hess pointed out, have every reasonable assurance that they will be reimbursed for their costs in furnishing covered services to medicare beneficiaries for the full 100 days of

their entitlement. Where the facility is in fact unable to collect the coinsurance and it is finally determined to be a "bad debt," the Social Security Administration reimbursement formula includes a provision for the inclusion of such losses.

With these policies in operation, Hess said, there would seem to be no need for deposits for covered services. "A requirement that would deny necessary extended care services to a medicare beneficiary because he is unable to make an advance payment would defeat the purpose of the medicare law," he pointed out.

Hess said that extended care facilities may properly require payment for services not covered by medicare, such as comfort items requested by the patient. But, he added, facilities participating in the program must not refuse admission to a beneficiary because of his inability to make advance payment of the coinsurance, nor may a facility evict or threaten to evict a beneficiary because he is unable to pay the coinsurance amount as it becomes due.

When the beneficiary has used up his 100 days of care under medicare, the facility may then ask for a deposit toward additional care, but the facility cannot require that this deposit be made

while the patient is still receiving medicare benefits.

AOA Taps 12 UMC Students

Twelve students at the University of Mississippi School of Medicine have been selected for membership in Alpha Omega Alpha, honor medical society.

New initiates are: George Oren Atkinson, Jr., of Pensacola, Fla.; William Andrew Causey of Jackson; Marvin Glenn Girod of Baton Rouge, La.; Charles Arthur Herbst, Jr., of Clinton; Frank Smith Hill, Jr., of Vicksburg; Sidney Ross Jones, III of Hollandale, and Fred Taylor Kimbrell of Natchez.

Also, Lucas Oliver Platt of Columbus; Jerry Ted Russell of Carthage; Larry Jay Sauls of Tyertown; Harry Milton Thomas, Jr., of Hattiesburg; and David Morelle Wells of Purvis.

Membership in Alpha Omega Alpha is based on scholarship, character and potential leadership.

*When the problem
is only skin deep*

USE 'POLYSPORIN'[®] brand POLYMYXIN B-BACITRACIN OINTMENT

**for topical antibiotic therapy with minimum
risk of sensitization**

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in 1/2 oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.



BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.



Heart Fellowships Are Opened for '68

The American Heart Association is now accepting applications for fellowships in medical education for the 1968-69 academic year.

The program is designed to stimulate careers in the field of research in medical education. Fellows receive training in a medical school's department of Research in Medical Education, where they are taught to analyze learning processes and modern teaching methods in preclinical and clinical fields. In addition, they study behavioral psychology and participate in pilot projects in continuing education.

U. S. citizens or those intending to become citizens, who hold either an M.D., Ph.D., Sc.D. or its equivalent, are eligible to apply. To meet the needs of candidates with varied backgrounds and experience, the stipend is based on qualifications and will be at least on the senior postdoctoral level.

Application forms may be obtained from the Director of Medical Education, American Heart

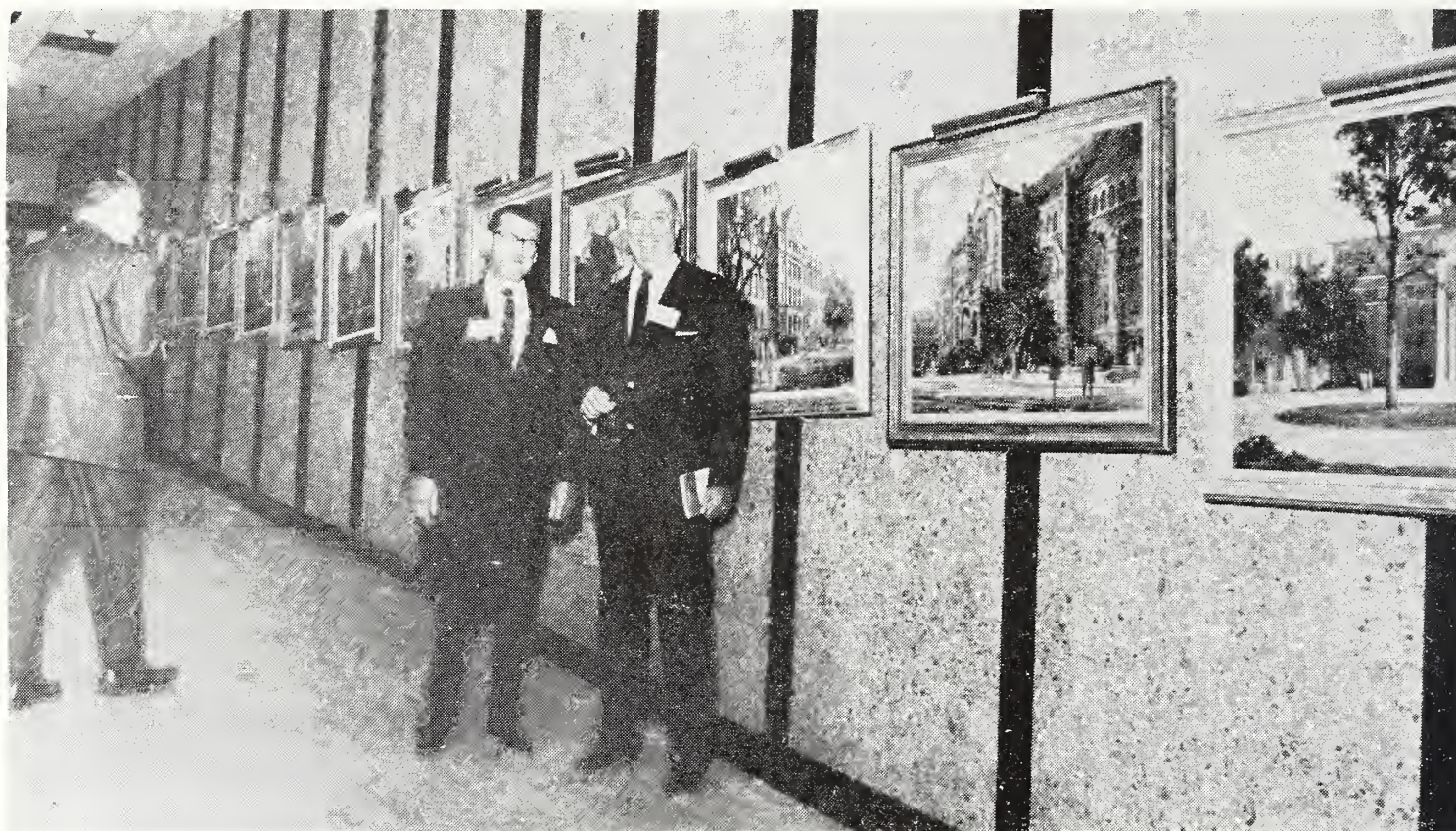
Association, 44 East 23rd St., New York, N. Y. 10010. Sept. 15, 1967 is the deadline for receipt of applications.

Squibb Commissions Medical Art Collection

Twenty original oil paintings of the oldest medical schools in America make up a new and unique collection commissioned and owned by E. R. Squibb and Sons. The collection is part of the "Collegia Medica" program which the long-established, ethical pharmaceutical manufacturer is sponsoring.

The long-range plan of the collection and program, Squibb spokesmen said, is to commemorate medical education in the United States. Actually, two paintings of each school are commissioned, with one being presented to the dean for permanent display. Where possible, local artists in the area of the schools are chosen for the commissions.

The firm plans to display the unusual art collection at medical meetings and other appropriate occasions.



The Squibb Collegia Medica art collection is shown on display at the recent San Francisco meeting of the American College of Physicians. Each of the 20 paintings is of an American medical school.

Viewers in foreground are Howard W. Baldock, Squibb director of medical relations, left, and Dr. Irving S. Wright, ACP president. Interested physician-viewer at far left is not identified.

UMC Announces New Faculty, Promotions

The University of Mississippi School of Medicine has added eight new faculty members, bringing the number of full-time members to 117, and has announced 17 faculty promotions effective July 1.

New associate professor is Dr. Aubrey Taylor, physiology and biophysics, who received the Ph.D. degree from the University of Mississippi Medical Center. A former assistant professor at UMC, he returns to the faculty from postdoctoral studies at the Harvard Medical School.

Four added assistant professors in the school of medicine are Drs. Richard Boronow and John W. Choate, obstetrics and gynecology; Benjamin R. Byers, microbiology, and Russell J. Christie, neurological surgery (research).

Dr. Boronow, former assistant professor of obstetrics and gynecology at Northwestern University Medical School where he earned the M.D. degree, interned at Cook County Hospital in Chicago and underwent his residency training at Evanston (Ill.) Hospital and Memorial Hospital for Cancer in New York. He has also studied at

the M. D. Anderson Hospital and Tumor Clinic at Houston.

Dr. Choate, former instructor at the University of Rochester School of Medicine, earned the M.D. degree at Johns Hopkins University. He interned at Johns Hopkins Hospital and took residency training there and at Strong Memorial Hospital in Rochester.

Dr. Byers received the Ph.D. degree from the University of Texas Medical School where he has been an assistant professor. Dr. Christie holds the D.V.M. degree from Texas A & M University and was formerly at the Texas A & M Experiment Station.

New instructors include Drs. Bennie Clower, anatomy, who earned a Ph.D. at the University Medical Center; William M. Hicks, pediatrics, who earned the M.D. from the University of Tennessee School of Medicine; and Robert R. Smith, neurological surgery, who received the M.D. degree from the University of Mississippi School of Medicine.

Faculty members elevated to full professorships are Drs. William O. Barnett, surgery, and John F. Jackson, preventive medicine. Dr. Jackson is also associate professor of medicine.

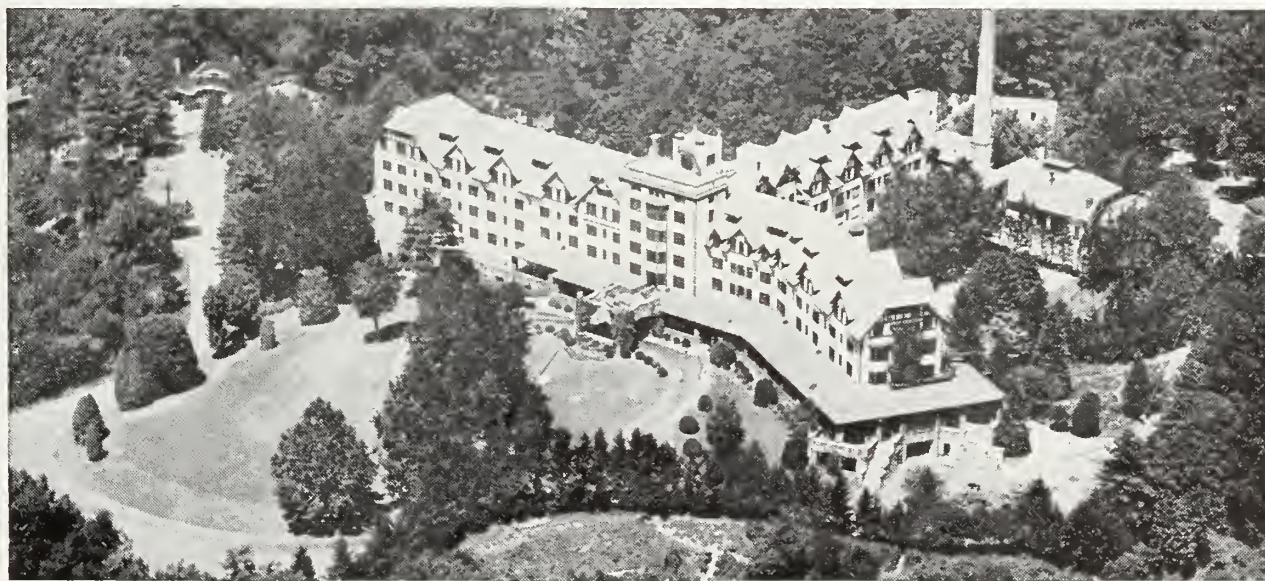
Promoted to associate professors were Drs.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

ORGANIZATION / Continued

Oliver Carrier, pharmacology; Thomas Milhorn and Elvin Smith, physiology and biophysics, and Hilary Timmis, surgery.

Members elevated to assistant professorships are Drs. Oliver Bell, biochemistry; John Bower, medicine; James Cooper, anesthesiology; Pat Crawford, physiology and biophysics; Calvin Hull, obstetrics and gynecology; James Hyde, microbiology; Luis Navar, physiology and biophysics; Stanley Rosenthal, physiology and biophysics; Stanley Russell, psychiatry; Robert Watson, preventive medicine, and Jack Wilkinson, biochemistry.

Wyeth Offers New Liquid Unit Dose

Unit doses for dispensing liquid drugs are available now in Wyeth Laboratories' Redipak™ liquid unit dose line. Each dose is prefilled in individually labeled glass bottles and sealed with a nonreactive liner with a tear-off cap. The liquid units are shipped 25 in each box.

Eight widely used medications—phenobarbital elixir U.S.P., paregoric U.S.P., terpin hydrate and codeine N.F. elixir, and five forms of Phenergan™



New Wyeth liquid drug unit doses are available in cartons of 25 units each. The line offers eight widely used liquid medicaments.

Expectorant—are being supplied in liquid unit doses, Wyeth officials announced. Four more products will be available in these units from Wyeth Laboratories within the next few weeks.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205-836-7201

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 42 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL.

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

Surgeons Receive NIH Cancer Grant

The American College of Surgeons has been awarded a federal grant under which it will develop optimal standards for hospital facilities and staff in the field of cancer care. Dr. Warren H. Cole, former professor of surgery at the University of Illinois College of Medicine and a past president of both the American Cancer Society and American College of Surgeons, is project director.

The grant is for \$44,376 and was awarded to the College by the Division of Regional Medical Programs of the National Institutes of Health. The project involves the assembly of a committee of experts, a series of consultations with various specialty disciplines, and the conduct of a series of meetings after which the standards will be drafted.

Alabama M.D.'s Face License Fee Hike

Alabama physicians face a 300 per cent increase in annual license renewal fees with a bill

pending in the present legislative session to raise the assessment to \$15 from \$5. The Medical Association of the State of Alabama is opposing the measure.

The state has a single healing arts licensure board which examines and licenses physicians, osteopaths, chiropodists, and chiropractors. The official body claims that it needs the additional funds for efficient operation. Less than half of the states impose an annual renewal fee for practice privileges and those that do usually charge less than \$5 per year. Mississippi has no such provision in its Medical Practice Act.

In Alabama, the chiropractors, in their usual opposite corner from physicians, support the fee increase.

Winged Staff Takes Wings

Dr. Cecil L. Gaston, Jr., of Meridian is hunting for an unidentified person or persons, as the police like to say, who may be carrying a caduceus around.

It seems as if somebody swiped Dr. Gaston's caduceus right off the front of his clinic building. He wants the cad who copped his caduceus.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761

ings which it is felt resulted from this new scheduling format.

Scientific Film Program. In an effort to vary and strengthen the association's scientific activities, the council has initiated a scientific film program for the 99th Annual Session. Scientific films will be shown prior to the morning scientific sessions on Tuesday, Wednesday, and Thursday, and the afternoon scientific session on Tuesday. These films will be related to the general scientific sessions to follow.

Special Symposiums. For the past several years, the council has arranged a special symposium on a topic of general medical interest for presentation on the Wednesday morning program at annual sessions. Your council feels that the symposiums have been highly successful but that they have perhaps served their usefulness for the present time. At the 99th Annual Session, therefore, this period of time has been devoted to the general scientific program. Future symposiums will be scheduled based upon their interest and relationship to the general scientific program.

Specialty Societies and Attendance. Your council is aware of the competition for attendance presented by the many and varied meetings for physicians. In this connection, your council wishes to report that eleven specialty societies will be meeting concurrently with the association's 99th Annual Session. The council believes that this combination of meetings benefits all groups involved and urges the support of the House of Delegates in encouraging a fuller implementation of this concept.

Additionally, your council wishes to note that although our association continues to surpass all other state medical associations in the Gulf South area in the percentage of members attending annual sessions, we still have a great number of county medical societies who fail to register anywhere near the total percentage of members attending annual sessions. During the 1967-68 association year, your council proposes to stimulate attendance from these county societies and urges the support of the House of Delegates in this connection.

Expression of the Council. Your Council on Scientific Assembly began active organization and planning for the present annual session in July of 1966. We are deeply grateful for the support, assistance, and cooperation which we have received, and we trust that the 99th Annual Session is professionally profitable and personally enjoyable to all.

Your reference committee commends the Council on Scientific Assembly for its excellent organization and conduct of the 99th Annual Session. We especially wish to recognize the diligent and constructive work of the chairman of the council, Dr. James L. Royals. Dr. Royals has added a new dimension to the scientific and social activities of our annual meetings and we wish to officially say what all of us have said unofficially—"Thank you, Dr. Jimmy."

Your reference committee notes the new scientific film schedule initiated at this meeting and urges the council to continue this new program feature. We also recommend that the council be authorized to further stimulate attendance of members and specialty society meetings at the annual sessions in such ways as it seems appropriate and within budgetary requirements. We note further that although the council did not arrange a special symposium for this annual meeting it does plan to schedule future symposiums based upon their interest and relationship to the general scientific program.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "A" OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Scheduling of Future Annual Sessions: Prior Action. At the 98th Annual Session in 1966, your council recommended that the House of Delegates adopt a four year advance schedule for annual sessions of the association. The House agreed to the following schedule beyond 1967:

- 100th Annual Session, Jackson, May 13-16, 1968
- 101st Annual Session, Gulf Coast, May 12-15, 1969
- 102nd Annual Session, Jackson, May 11-14, 1970

Following this action in 1966, arrangements were made with hotels in Biloxi and Jackson for the years 1967 and 1968, respectively.

Review by the Council. In planning the present annual session, your council conducted a detailed critique of the 1966 meeting at Jackson. In its discussions, the council unanimously recognized that:

(1) Attendance upon annual sessions at the Mississippi Gulf Coast has progressively increased to the point where it is comparable with attendance in Jackson.

(2) There has been a continual improvement and modernization of hotel and convention facilities.

ties at the Gulf Coast, whereas Jackson is experiencing a loss of convention facilities with the closing of major hotels.

(3) Participation in Gulf Coast annual sessions, both as to the Scientific Assembly and other concurrent activities, is distinctly superior to participation in Jackson, and the council feels that the resort environment and excellent hotel facilities are contributing factors in this experience.

(4) The distance involved in travel to the Gulf Coast is apparently no factor, since studies show that registration by component medical societies in the northern area of the state is not only comparable but in some instances, higher on the Coast than in Jackson.

Recommendation. In the light of these considerations and the growing requirements of the association for modern, flexible, and adequate facilities and services for the annual session, the council recommends that:

(1) The 100th Annual Session be conducted at Jackson during the period May 13-16, 1968, and that this commitment by the association and Jackson hotels be fully carried out.

(2) The 101st Annual Session be conducted as scheduled at the Gulf Coast, May 12-15, 1969.

(3) The 102nd Annual Session be conducted at the Mississippi Gulf Coast May 11-14, 1970, and

(4) All future annual sessions after 1970 be conducted at the Gulf Coast until such time as more adequate and suitable convention facilities are made available at Jackson, when a rotation schedule may again be considered.

The council is unanimous in this decision and recommendation. We believe that this proposal, if adopted by the House of Delegates, will contribute measurably to the success, growth, and professional and personal benefit of our annual session.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee gave extensive consideration to the recommendation from the council that future annual sessions after 1970 be conducted at the Gulf Coast until such time as more adequate and suitable convention facilities are made available at Jackson, when a rotation schedule may again be considered. The views of the council on the factors influencing this recommendation are aptly stated in the report and your committee re-emphasizes these at this time. We also had the benefit of counsel from the chairman of the Council on Budget and Finance and the Secretary-Treasurer of the association in considering this recommendation, and they concur with us.

Your reference committee recommends that Supplemental Report "A" of the council be adopted. That is:

(1) The 100th Annual Session be conducted at Jackson during the period May 13-16, 1968, and that this commitment by the association and Jackson hotels be fully carried out.

(2) The 101st Annual Session be conducted as scheduled at the Gulf Coast, May 12-15, 1969.

(3) The 102nd Annual Session be conducted at the Mississippi Gulf Coast, May 11-14, 1970, and

(4) All future annual sessions after 1970 be conducted at the Gulf Coast until such time as more adequate and suitable convention facilities are made available at Jackson, when a rotation schedule may again be considered.

In discussion of the Council on Scientific Assembly's reports before your reference committee, some of those in attendance were surprised and, therefore, gratified to learn that the many association activities of the annual session, except for our Wednesday evening party, are supported entirely by fees paid by our technical exhibitors for exhibit space. The cost of an annual session runs more than \$10,000. Your reference committee wishes to invite your attention to this fact and urge your interest in and support of our technical exhibitors.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Organization and Duties. The Council on Medical Service is a constitutional body of the House of Delegates. It is charged with the responsibility of ascertaining and studying all aspects of medical care in Mississippi. Under its jurisdiction there are assigned the activities of the association in medical service, emergency service programs, indigent care and allied medical agencies. The council is assisted in its work by three constitutional committees and three *ad hoc* committees. Programs, studies, and activities of the council's several committees during the 1966-67 association year embraced a wide range of subject areas and policy development. These were:

Committee on Mental Health. This committee has continued to monitor the Mississippi Mental Health and Mental Retardation program established by act of the Mississippi Legislature during its 1966 Regular Session. The concept of regional mental health and mental retardation centers located in nine geographic regions of the state has been enthusiastically received in certain communities in Mississippi during the past year. Based

HOUSE OF DELEGATES / Continued

upon prior policies of the association's House of Delegates to the effect that personnel recruitment and training should be given first priority in establishing the mental health and mental retardation program in Mississippi, the committee felt it desirable to restate this policy in the light of advising against possible hasty establishment of service facilities before necessary staffing personnel were available. This was done in a letter to the secretaries of the association's component societies in December of 1966. An editorial in this connection titled "The Challenge of People: Key to Care of the Mentally Ill" was authored by the committee's chairman and published in the February, 1967, issue of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. The committee recommends that a mental health training center be established in conjunction with the University Medical Center at the earliest possible time.

Committee on Occupational Health. This committee has continued its study of occupational health programs in small plants in Mississippi. The study will be the subject of a special supplemental report to the House of Delegates at the 99th Annual Session.

Committee on Maternal and Child Care. The committee has continued its study of maternal deaths in Mississippi. During the past year the committee has reviewed and evaluated 38 maternal deaths occurring in Mississippi. As of January, 1967, the committee has sent out 504 inquiries on maternal deaths since its study began in January, 1958. Replies have been received in 421 or 83.5 per cent of these cases. In an effort to retain and improve the response level to its inquiries, the committee during the past year wrote each chief-of-staff of licensed general acute care hospitals in Mississippi to inform them of the committee's study and forward a copy of the "AMA Guide for Maternal Mortality Studies."

Supplementary to its studies, the committee has presented the following scientific papers in the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION: "Amniotic Fluid Embolism: The Non-Fatal Case" (November, 1966); "Maternal Mortality in Mississippi During 1962" (February, 1966); "Maternal Mortality in Mississippi During 1963" (May, 1966); "Maternal Mortality in Mississippi During 1964" (August, 1966).

In connection with its 1964 report, the committee notes with serious concern that maternal mortality in Mississippi during that year was the highest since 1960. The committee respectfully invites the attention of physicians in Mississippi to this published report. It should be noted, too,

that Mississippi continues to have the highest maternal mortality rate in the United States.

In an effort to improve and make a more useful presentation of the data collected in its studies, the committee initiated a project in the latter part of 1966 to reduce all its study data to IBM. This will involve the 421 maternal deaths studied by the committee thus far and all future maternal deaths. The committee is also reviewing a postgraduate educational project conducted by the Michigan State Medical Society's Committee on Maternal and Child Care with a view towards making specific recommendations in this connection for implementing the program in Mississippi.

Committee on Nursing (ad hoc). This committee was appointed by the council during the 1966-67 association year to establish a program of active liaison with the Mississippi Nurses Association. The committee will serve as a forum for physicians and nurses to discuss their mutual interests and problems. Your council is happy to report that the Mississippi Nursing Association shares the council's enthusiasm for the concept and activities of this committee.

Health Insurance Benefits Advisory Committee (ad hoc). In accordance with its constitutionally assigned duty to "ascertain and study all aspects of medical care in Mississippi . . . and act as a factfinding and advisory body of the association," the council appointed this committee to establish close liaison with all public and private agencies concerned with the operation of the Medicare program (Public Law 89-97) in Mississippi. The committee will serve as a factfinding and advisory committee to the council and recommendations and reports resulting from the committee's activities will be presented to the House of Delegates.

Committee on Blood and Blood Banking (ad hoc). This committee continues to monitor all aspects of blood banking and transfusion service, blood products, and professional and socioeconomic policy in this connection. The committee was gratified to see passage of House Bill 230 during the 1966 Regular Session of the Mississippi Legislature. This bill to define blood banking as a service and not a sale was recommended by the committee. It is believed that this law will have a beneficial effect on blood banking activities in Mississippi.

The committee has also followed with great interest the enactment and implementation of Senate Bill 1643, 1966 Regular Session of the Mississippi Legislature. This law set up a blood and blood plasma program at the Mississippi Penitentiary at Parchman. Contract for the program was awarded to the Cutter Laboratories of Berkeley, California. The committee met with

representatives of the Cutter Laboratories who presented the program proposed for the Mississippi Penitentiary and asked the counsel, guidance, and support of the association in this regard. Based upon the committee's review and study of this program, the council recommends full and complete support for the program.

Activities of The Council. In addition to the work of its several committees, the council has considered and acted upon items referred from the House of Delegates and items of medical service interest resulting from actions of the AMA House of Delegates. These will be the subject of a special supplementary report to be presented to the House of Delegates.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee is impressed by the work of the Council on Medical Service and its several committees. The annual report of the council outlines this work and we commend the members of the council and its several committees in this regard. Your committee wishes to call the attention of the House of Delegates to the Mississippi Mental Health and Mental Retardation Program reported on by the Committee on Mental Health. We urge implementation of this program and the active support and participation of physicians in this regard.

The council's Committee on Maternal and Child Care continues its important study of maternal mortality in Mississippi. Your committee notes that the maternal death rate in our state still greatly exceeds the national average and we endorse the activities of the Committee on Maternal and Child Care towards reducing this rate.

Your committee commends the council for its organization of a Committee on Nursing to conduct active liaison with members of the nursing profession. We note with serious concern the need for more nurses in our state, and we believe that our profession has an obligation to assist in solving this problem.

We also commend the activities of the council's new Health Insurance Benefits Advisory Committee in monitoring the operation of the Medicare program in Mississippi. We urge all members of the association to furnish the committee information on any adverse experience they have with this program.

Your reference committee notes the participation of the council's Committee on Blood and Blood Banking in the organization of a blood and blood plasma program at the Mississippi Penitentiary at Parchman. We commend the concept and operation of this program and urge the

Committee on Blood and Blood Banking to continue to closely monitor the program and report on its operation.

With the foregoing remarks, we approve the annual report of the Council on Medical Service and recommend its adoption.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "A" OF THE COUNCIL ON MEDICAL SERVICE

Policy Recommendations: Your Council on Medical Service has reported on the work of its several committees for the 1966-67 association year in the Handbook of the House of Delegates and respectfully commends this report to the attention of each member of this House of Delegates. Based upon its constitutionally assigned duty to ascertain and study all aspects of medical care in Mississippi, your council and its committees have considered a wide range of subject areas and policy development during the 1966-67 association year which are respectfully presented to the House of Delegates for your consideration and final action at this time.

Physician Representation on Hospital Governing Boards. Your council has considered the desirability and necessity of maintaining formal liaison between the medical staffs and governing boards of Mississippi hospitals. Except for the office, home, and nursing home, the hospital is the sole, and admittedly most important, clinical environment in which the physician cares for his patient. Without the hospital, the physician would be unable to exercise fully his special skills, and without the physician, the hospital is a queerly useless institution. Unfortunately, however, at times the medical staffs of hospitals are not a party to policy decisions affecting patient care. Your council believes that the association should formally recognize the need for close liaison between medical staffs and governing boards of hospitals and recommends the following policy statement for adoption by the House of Delegates in this regard:

The Mississippi State Medical Association recognizes the need for close liaison between hospital medical staffs and governing boards and recommends that each hospital in the state have at least two voting doctors of medicine on its governing board who are either appointed or elected by the hospital medical staff from its membership.

Title XVIII, Public Law 89-97 (Medicare). Your council has acted to establish formal liaison with public and private agencies concerned with

HOUSE OF DELEGATES / Continued

the operation of the Medicare program in Mississippi and continues to closely monitor this program. In this connection, your council wishes to encourage members of the association to report to the council, in writing, any adverse experience they might have in rendering professional services to beneficiaries of the Medicare program so that the council may formally pursue corrective action through its Health Insurance Benefits Advisory Committee. The council also recommends that the House of Delegates authorize it to develop a brief questionnaire concerning Medicare for mailing to each member of the association during the 1967-68 association year which would be designed to elicit a subjective response to the operation of Medicare in Mississippi, especially in the light of Section 1801—Public Law 89-97, to wit:

“Sec. 1801. Nothing in this title shall be construed to authorize any supervision or control over the practice of medicine or the manner in which medical services are provided, or over the selection, tenure, or compensation of any officer or employee of any institution, agency or person providing health services; or to exercise any supervision or control over the administration or operation of any such institution, agency, or person.”

Based upon information brought to its attention concerning operation of the Medicare program in Mississippi, your council would also like to recommend the following:

(a) *Referral of Medicare Patients to Approved Hospitals.* Your council believes that the question of certification or non-certification of licensed general hospitals in Mississippi as “providers of care” under Title XVIII, Public Law 89-97 is a matter to be decided by the local community concerned. The council recommends, however, that when it is necessary to refer a Medicare patient to an approved Medicare hospital that such referral only take place after proper notification and acceptance by the hospital concerned under an arrangement which also takes into account professional service capabilities.

(b) *Hospital Related Professional Services.* Your council respectfully invites the House of Delegates’ attention to the difficulties being experienced in separating the services of pathologists and radiologists into professional and hospital components under Medicare. It has been the association’s policy “to reject any definition that

would seek to portray the practice of any medical discipline as a hospital service.” However, neither the policy nor the circumstances surrounding its formulation and adoption could have possibly anticipated difficulties being encountered in separate billing by physicians whose practice environment is the hospital. Particularly is this being encountered in the division of such service charges between parts 1-A and 1-B of Medicare. In the interest of supporting the independent professional integrity of these physicians, as the association is pledged to do, and in the interest of helping resolve problems in this connection, your council recommends that specialty societies concerned consider carefully the impact of billing practices as they now exist and the possibility of revising methodology for resolving problems in this regard.

Teaching Programs. At the 98th Annual Session, in considering the council’s Supplemental Report No. 8-A concerning the University Medical Center teaching program project, this House of Delegates stated:

“The House of Delegates restates emphatically its 1964 policy statement on this project. That is:

“ ‘The House of Delegates recommends implementation of the proposed teaching program. We feel that the program will benefit the state, increase teaching opportunities, and upgrade the quality of care in the state’s hospitals. We urge the support of University authorities in this connection.’

“The House of Delegates further recommends that the council pursue a course of active liaison with the University of Mississippi School of Medicine on this project as soon as a permanent Dean is named for the University.”

Your council is happy to report that a committee of representatives from the council and the UMC has been formed to further pursue this project. This committee is mindful of the extensive medical legislation enacted since initiation of the teaching program project in 1963 to include Titles XVIII and XIX of Public Law 89-97 and such legislation will be carefully considered in discussion of the teaching program project.

Title XIX, Public Law 89-97. Your council has carefully considered Title XIX, Public Law 89-97 and wishes to strongly associate itself with the recommendations of the Board of Trustees concerning implementation of Title XIX in Mississippi. Your council makes these observations

regarding the "legislative intent" of Congress in enacting Title XIX as contrasted to Medicare (Title XVIII) which it believes are important in viewing the long run need for implementation of Title XIX by the states and the possible results if this implementation is not forthcoming:

(a) Title XIX is intended to assist only the medically needy as defined by a state within broad federal guidelines. Medicare (Title XVIII) assists everyone over age 65 regardless of need as defined by Congress.

(b) Title XIX cannot operate in any state without an affirmative act by the state's legislature. It is a federal-state program administered by the states. Medicare (Title XVIII) is a federal program administered by the Department of HEW and a state has only passive control over operation of the program within its borders, and

(c) The Kerr-Mills and now the Title XIX concept have been supported by conservative members of both parties in Congress. Medicare (Title XVIII) is primarily supported by labor oriented members of Congress who began their drive for enactment of the program by urging adoption of a national program of health care for everyone regardless of age and need.

Commitment and Treatment of Alcoholics. Your council recommends that the association through its appropriate legislative policy and development body investigate the status of commitment and treatment procedures in Mississippi for alcoholics. The council believes that such studies should also view the feasibility of using alcoholic beverages tax monies to support treatment facilities for alcoholics.

The council also recommends that hospitals in the state be urged to look upon alcoholism as a medical problem and to admit patients who are alcoholics for treatment after due examination, investigation and consideration of the individual patient. Further, the council recommends that insurance companies and prepayment plans remove unrealistic limitations on the extent of coverage afforded for the treatment of alcoholism.

Physician Draft. Your council has reviewed a report and recommendation of the American Medical Association which would seek federal legislation to establish a National Commission on Health Resources and Medical Manpower. The commission would revise the "doctor draft" system and establish physician allocation priorities to maintain a proper balance of health personnel in civilian and government service. Moreover, the commission would give medicine a more direct and a stronger voice in the selective service system. Your council recommends that the House

of Delegates endorse the concept of the AMA recommendation and so inform our Congressional delegation.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee has considered the policy recommendations of the Council on Medical Service and recommends the following in this regard:

(a) *Physician Representation on Hospital Governing Boards.* Your reference committee considered the recommendation of the Council on Medical Service concerning physician representation on hospital governing boards. We recommend that the House of Delegates adopt the following policy statement from the council in this regard:

The Mississippi State Medical Association recognizes the need for close liaison between hospital medical staffs and governing boards and recommends that each hospital in the state have at least two voting doctors of medicine on its governing board who are either appointed or elected by the hospital medical staff from its membership.

We also recommend that the Council on Legislation seek such statutory amendments as necessary and advisable in implementing this policy statement.

(b) *Title XVIII, Public Law 89-97 (Medicare).* We approve the several recommendations of the council concerning operation of the Medicare program in Mississippi. We particularly invite the House of Delegates' attention to the remarks of the council concerning referral of Medicare patients to approved hospitals and strongly join the council in its recommendation that when it is necessary to refer a Medicare patient to an approved Medicare hospital that such referral only take place after proper notification and acceptance by the hospital concerned under an arrangement which also takes into account professional service capabilities.

(c) *Teaching Programs.* Your reference committee commends the council for its continued work on the University Medical Center teaching program project. We note with the council that extensive medical legislation has been enacted since initiation of the teaching program project in 1963 to include Titles XVIII and XIX of Public Law 89-97 and endorse the council's view that such legislation should be carefully considered in future discussion of this project.

(d) *Commitment and Treatment of Alcoholics.* We approve the council's recommendations con-

HOUSE OF DELEGATES / Continued

cerning commitment and treatment of alcoholics. We believe the Council on Legislation should study the status of commitment and treatment procedures for alcoholics and recommend such statutory changes as may be advisable in this regard.

(e) *Physician Draft.* The council recommends that the association join the AMA in seeking federal legislation to establish a National Commission on Health Resources and Medical Manpower to oversee operation of the "doctor draft" system. We endorse this recommendation and urge the support of our Mississippi congressional delegation in this regard.

The report of the reference committee was adopted.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

So much of Supplemental Report "A" of the Council on Medical Service as relates to Title XIX of Public Law 89-97 was referred to the Reference Committee on Reports of Officers and Board of Trustees. The approval action of the reference committee on Supplemental Report "A" of the Board of Trustees applies equally to the supplemental report of the council on the same subject.

SUPPLEMENTAL REPORT "B" OF THE COUNCIL ON MEDICAL SERVICE

Occupational Health Study: The Committee on Occupational Health is a constitutional body of your Council on Medical Service. The committee is responsible for the study of all aspects of occupational health in Mississippi, collection and evaluation of data in this field, for conducting liaison with public and private agencies having interests in occupational health to include rehabilitation of the occupationally disabled, and for making recommendations to the association through your council in this connection.

Study of Occupational Health Programs. The Committee on Occupational Health has completed a three year study and research project on occupational health programs in small plants in Mississippi, and its study report titled "Occupational Health Programs in Small Plants in Mississippi" has been forwarded to each member of this House of Delegates. The present report from your council is concerned with this study and recommendations with reference to occupational health programs in small plants in Mississippi and future work in these connections.

Goals in the Study Project. Recognizing that current, factual information on occupational

health programs in small plants in Mississippi was needed, the Committee on Occupational Health undertook this study with the belief that new information thereby discovered would be useful in:

- Promoting sound health practices,
- Encouraging healthful work environments,
- Promoting plant safety and safety education,
- Encouraging comprehensive and realistic pre-employment physical examinations,
- Assisting employers in cost reduction by reducing absenteeism, sickness, and accidents, and
- Facilitating optimum job placement and helping to insure the suitability of individuals in jobs according to their physical capacities, mental abilities, and emotional make-up and which they can perform with an acceptable degree of efficiency without endangering their own health or that of their fellow employees.

Conclusions From Study. The Committee on Occupational Health makes the following conclusions based upon its study of occupational health programs in small plants in Mississippi:

(a) Occupational health programs in small plants in Mississippi are desirable, useful, wanted and needed.

(b) The need for these programs in small plants is illustrated in the study findings, especially with reference to the occurrence pattern.

(c) There is a need to interest physicians in occupational health programs in small plants and to interest employers to seek the services of physicians for conducting these programs. Implementation in this connection should be undertaken with full awareness of and regard for ethical considerations inherent in this statement.

(d) The format and content of a suitable occupational health program for small plants in Mississippi should be defined and described.

Recommendations. Your council respectfully recommends adoption of the conclusions made from the study as association policy. In connection with the fourth conclusion, your council recommends that the Committee on Occupational Health be authorized to develop and publish principles for occupational health programs in small plants in Mississippi.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee commends the council's Committee on Occupational Health for its study and research project on occupational health programs in small plants in Mississippi. We recommend adoption of the conclusions and recommendations resulting from this study contained in Report No. 5-B.

The report of the reference committee was adopted.

REPORT OF THE COMMITTEE ON AMA-ERF

Organization and Duties. Your Committee on AMA-ERF is composed of one member from each component medical society appointed annually by the president of our association. The committee works in conjunction with the American Medical Association-Education and Research Foundation and solicits voluntary contributions from Mississippi physicians for medical education and research. All contributions are tax deductible and every dollar received is put to work in a medical school of the donor's choice.

1966 Contributions. Your committee is happy to report that Mississippi physicians contributed \$7,572.26 to AMA-ERF during 1966. Our University of Mississippi School of Medicine's AMA-ERF allocation for 1966 was \$9,810.52. Over 70 per cent of this amount represented contributions from Mississippi physicians; the remainder was the University's share of undesignated contributions.

1967 Program. Your committee earnestly solicits a contribution to AMA-ERF from every Mississippi physician in 1967. We note the policy of a number of our component medical societies to devote a portion of one meeting each year to an appeal for AMA-ERF contributions. Your committee commends this policy to all component societies.

REPORT OF THE REFERENCE COMMITTEE
ON MISCELLANEOUS BUSINESS

Your reference committee is pleased to note that Mississippi physicians gave over \$7,000 last year for support of our medical schools through AMA-ERF. We urge continued support for this worthy program. We approve this report and recommend its adoption.

The report of the reference committee was adopted.

RESOLUTION NO. 1, IN MEMORIAM

Dr. James L. Royals: WHEREAS, There are absent from among our numbers 18 members who have been called by Divine Providence since the 98th Annual Session; and

WHEREAS, Although we are grieved upon the passing of these beloved colleagues and friends, we are inspired by their lives of service and professional attainment; and

WHEREAS, This expression of our grief, deep affection, and respect should be recorded permanently among official records of the Mississippi State Medical Association, now, therefore, be it

Resolved, That this House of Delegates does mourn the passing of the following esteemed colleagues:

- John G. Archer, Greenville, April 19, 1967
- George Baskervill, Greenwood, November 1, 1966
- Albert C. Bryan, Sr., Meridian, February 24, 1967
- Thomas G. Cleveland, Meridian, June 17, 1966
- Samuel W. Colquitt, Pine Bluff, Arkansas, April 4, 1967
- Harry E. Hoke, Gulfport, February 22, 1967
- Joel W. Howell, Durant, September 10, 1966
- Emmett D. Kemp, Magee, November 17, 1966
- John R. Kittrell, Laurel, September 22, 1966
- J. Walton Lipscomb, Jr., Jackson, July 11, 1966
- James N. Lockard, Pascagoula, June 16, 1966
- Charles F. Mitchell, Brandon, September 4, 1966
- Dudley R. Moore, Byhalia, April 9, 1967
- Thomas C. Oliver, Leland, May 22, 1966
- Camal P. Petro, Jackson, October 25, 1966
- Franklin G. Riley, Meridian, April 5, 1967
- Schubert B. Simmons, Newton, December 26, 1966
- Daniel Trigg, Greenwood, April 16, 1967

ACTION OF THE HOUSE OF DELEGATES

Without objection, Resolution No. 1 was acted upon without referral and adopted by the House of Delegates with all present standing in silent tribute.

RESOLUTION NO. 2, COMMISSION ON THE
MEDICAL ASPECTS OF SPORTS

Dr. Carl D. Brannan: WHEREAS, The physical development of our youth is a paramount part of our state's and nation's strength, and

WHEREAS, Physical fitness is accomplished in the public school system, colleges, and universities within the various states, and

WHEREAS, Competitive athletics are healthy and desirable—morally and physically—within and among the schools of all levels, and

WHEREAS, Organized medicine continually is taking part in medical and surgical aspects of sports, and

WHEREAS, Various groups of physicians are and have made important contributions in the prevention and treatment of the various medical aspects of sports, and

WHEREAS, With increasing numbers of our youth engaged in competitive athletics, the public interest can best be served by knowledgeable individuals working together to improve all sports for all participants, spectators, family, and school, now, therefore, be it

Resolved, That the Mississippi State Medical Association recommend to the Governor of the State of Mississippi that a Commission on the

HOUSE OF DELEGATES / Continued

Medical Aspects of Sports be created within the organization of the Government of the State of Mississippi, and be it further

Resolved, That the Commission be composed of two members from the Mississippi State Medical Association, selected by the president of the Mississippi State Medical Association; two members of interested legislators, selected by the Governor; and two members of the State Department of Education Association appointed by the president of the M.E.A.

Each member of the Commission would serve a four year term to coincide with the incoming Governor. They would serve without pay. And, be it further

Resolved, That this Commission would be charged with the following responsibilities:

(1) Advise every Governor of current improvements, techniques, and concepts pertaining to the medical aspects of sports.

(2) Obtain and maintain complete records of illness attributed to participation in any of the various sports in which the schools at every level participate.

(3) Evaluate every incident that has led to death or premature disabilities.

(4) Recommend measures to the Governor which will promote a healthier athletic atmosphere within the state.

(5) Cooperate with various State Agencies in bringing forth information on athletic injuries to schools, parents, the participants, and the general public.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee gave careful consideration to this constructive resolution from the Central Medical Society. We believe that medicine has a duty and obligation to furnish positive leadership in the organization of athletic programs in our schools. We recommend adoption of this resolution with the following amendments:

(1) That the proposed Commission on the Medical Aspects of Sports include not only representatives of the groups specified in Resolution No. 2, but also two representatives of the Mississippi High School Athletics Association, selected by the president of that organization.

(2) That it be emphasized that the intent of the proposed commission is to prevent athletic injuries, and

(3) That items (2) and (3) of the resolution concerning the proposed commission's obtaining and evaluating medical records of illness attributed

to participation in sports be carefully evaluated by legal counsel for possible medical-legal considerations affecting the privilege of the physician-patient relationship.

The report of the reference committee was adopted.

RESOLUTION NO. 3, AMA AIMS

Dr. John F. Lucas: WHEREAS, The principles of medical ethics adopted in 1957 have not fully developed a concept native to the physician's highest ideals, and

WHEREAS, The Board of Trustees of the AMA appointed a Committee to Study AMA Objectives and Basic Programs, to report on, among other items, "(a) redefinition of the central concept of AMA objectives and basic programs," and "(c) taking the lead in creating more cohesion among national medical societies." The committee is "earnestly seeking constructive criticisms," (*JAMA*, May, 1958), and

WHEREAS, Our own state association has acted to enlarge its by-laws and extend its study to other disciplines of knowledge in quest of Healing for Mankind under Truth, Diligence Service (MSMA), 90th Session, 1958, Resolution No. 4, and

WHEREAS, The late AMA president, Dr. Norman Welch, in his inaugural address, 1964, "Unity in Medicine," pointed to the splintering efforts of specialization. It "sacrifices the whole vision of his science and the universal vision of his world," and

WHEREAS, Dr. Hudson, president of AMA, and Dr. Rouse, president-elect of AMA, have expressed interest in and given encouragement to efforts directed toward strengthening the constituted mission of our organization, and

WHEREAS, The energy and attention of the Executive Offices of AMA need renewed incentives for the tasks, now, therefore, be it

Resolved, That our organization take steps to (1) re-examine AMA constituted aims; (2) re-define healing for renewed vision of our mission; and (3) establish healing in the Principles of Medical Ethics as the central aim and aspiration of the AMA.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee gave extensive consideration to this resolution. Both the author of the resolution and the Speaker of the House appeared before the committee to discuss this item of business. Your reference committee recommends adoption of the resolution with the following amendment:

Delete items (1) and (2) of the resolved clause so that it reads:

Resolved, That our organization take steps to establish healing in the Principles of Medical Ethics as the central aim and aspiration of the AMA.

The report of the reference committee was adopted.

RESOLUTION NO. 4, TRIBUTE TO
HONORABLE WALTER SILLERS

Dr. John T. Milam: WHEREAS, The late Honorable Walter Sillers of Rosedale served his state and its citizens as a leader in government for nearly half a century, and

WHEREAS, Mr. Sillers' exercise of statemanship and leadership in the Mississippi Legislature as Speaker of the House of Representative contributed importantly to major achievements in government, and

WHEREAS, His wise counsel and patient understanding was always given the Mississippi State Medical Association on matters relating to the health of the public and in constructive health legislation, now, therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association does mourn the loss of this statesman, leader in government, and friend and does now record its affection and respect for his brilliant record of service to Mississippi and her citizens.

ACTION BY THE HOUSE OF DELEGATES

Without objection, Resolution No. 4 was acted upon without referral and adopted by the House of Delegates with all present standing in silent tribute.

RESOLUTION NO. 5, PHYSICIAN
REPRESENTATION ON HOSPITAL BOARDS

Dr. C. D. Taylor, Jr.: WHEREAS, Every such hospital was erected, constructed and so constituted, specifically and primarily to provide the best possible facilities for the reception, housing, care, and treatment for the ill or injured while there for treatment under the supervision and direction of their respective doctors, all of whom, generally, are members of the respective hospital medical staffs of such city, county, and city-county hospitals, provided by Sections 7129-54, 7129-56 of the Mississippi Code of 1942, and amendments thereto; and, that the best possible medical and hospital service to the patient and the community can be furnished only through close cooperation and liaison between each of the said hospitals and their respective medical staffs, and

WHEREAS, Doctors, as a class, are peculiarly qualified through education, training and experi-

ence to provide active support and advice and to suggest policies from time to time relating to the operation of hospitals and effecting a better understanding and closer harmony between the Boards of Trustees and the medical staffs of such hospitals, and

WHEREAS, Such harmony and coordinated efforts can best be served by having a member of each of such hospitals medical staff appointed to the Board of Trustees of each of such hospitals, provided that the member of such medical staffs to be appointed to the Boards of Trustees of such hospitals shall first be selected from the medical staff by a majority of the members thereof, and

WHEREAS, Through proper liaison between the hospital Boards of Trustees, or governing board, and the medical staff, the interests of the patient, and all concerned, can best be served, and

WHEREAS, Under the present statutes hereinabove referred to, relating to the appointment of the members of the Boards of Trustees of such hospitals, there is no provision for appointments of doctor members to the said Boards of Trustees and that the said statutes should be amended to provide that one doctor, chosen from the medical staff and by the medical staff, from each of such hospitals, must be included as a duly and legally constituted member of the Boards of Trustees of such hospitals throughout the state, now therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association actively and aggressively promote membership to each of the city, county, and city-county hospital Boards of Trustees throughout the state by amending Sections 7129-54, 7129-55, and 7129-56 of the Mississippi Code of 1942, and amendments thereto, so as to make mandatory the appointment of one doctor from the staff of the said medical staffs of said hospitals to the Boards of Trustees of each of such hospitals as a duly and legally constituted member of said Boards of Trustees of each of such hospitals, so as to provide for such appointments.

REPORT OF THE REFERENCE COMMITTEE
ON MEDICAL PRACTICES

Your reference committee considered Resolution No. 5, introduced in behalf of the Coast Counties Medical Society, in conjunction with the Supplemental Report "A" of the Council on Medical Service. In view of the action taken on the council's supplemental report and with the belief that both the intent of the Council on Medical Service and the Coast Counties Medical Society in regard to physician representation on hos-

HOUSE OF DELEGATES / Continued

pital governing boards has been accomplished, we recommend that Resolution No. 5 be not adopted.

The report of the reference committee was adopted.

EMERGENCY BUSINESS

Dr. J. P. Culpepper, Jr., of Hattiesburg inquired if the chair would entertain a resolution introduced as emergency business at the adjourned meeting of the House of Delegates on May 18, 1967. Dr. Culpepper stated that the resolution related to the position of the association on the AMA group insurance program which was scheduled for consideration at the AMA Annual Convention at Atlantic City, N. J., June 18-22, 1967.

There was no objection to introduction of the resolution, and under the rules, the Speaker authorized Dr. Culpepper to present it.

RESOLUTION NO. 6, AMA GROUP INSURANCE PROGRAM

Dr. J. P. Culpepper, Jr.: WHEREAS, The House of Delegates of the AMA established a group insurance program for members in 1961, and

WHEREAS, The program was successfully and extensively implemented with a substantial segment of our membership participating, and

WHEREAS, Actions have been initiated to alter the program drastically, including terms and conditions of benefits, and

WHEREAS, There are many members of the association who have deeply committed themselves in participating in this program and might not now be able to qualify as an insurable risk under a new program, and

WHEREAS, There is available to this association a continuation of our present program with a reliable carrier and an efficient, interested administrator, now, therefore, be it

Resolved, That this House of Delegates does endorse and approve continuation of the AMA group insurance program as initially organized and constituted and as now available to us.

ACTION BY THE HOUSE OF DELEGATES

After discussion by Dr. Culpepper, the Speaker asked the pleasure of the House of Delegates. On motion by Dr. Stanley A. Hill, second by Dr. Eldon L. Bolton, Resolution No. 6 was adopted.

RESOLUTION NO. 7, LIMITATION UPON TERMS OF AMA DELEGATES

Drs. S. Lamar Bailey and H. C. Ricks, Sr.: WHEREAS, This House of Delegates has placed limitation upon terms of service for members of

the Board of Trustees and all elected councils of this association, and

WHEREAS, It is the clear intention of our association to afford all members ample opportunity to serve medical organization at every level, now, therefore, be it

Resolved, That so much of Section 6, Chapter V, By-Laws of the Mississippi State Medical Association as reads: "It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, the term of office to begin on January 1 of the year following that of the elections and continuing for two successive years," be amended to add the following: "provided, however, that no individual so elected shall serve more than three successive terms."

Under the rules, the Speaker ordered that the resolution lie on the table for one year.

ADDITIONAL BUSINESS OF THE HOUSE OF DELEGATES

Dr. Jo N. Robinson of Columbus reported as fraternal delegate to Alabama. President Thompson presented the 1967 MSMA-Robins Award to Dr. Frank M. Acree of Greenville. Dr. James L. Royals presented the 1967 Aesculapius Award and an honorarium of \$200 to Dr. William O. Barnett of Jackson in behalf of the Council on Scientific Assembly for having presented the scientific exhibit adjudged most outstanding by a member of the association.

The MSMA Scientific Achievement Award was presented by Dr. Royals to Dr. John D. Jackson of New Orleans for having presented the scientific exhibit adjudged most outstanding by a guest exhibitor.

Mrs. J. Gordon Dees of Jackson, 1966-67 President of the Woman's Auxiliary to the Mississippi State Medical Association, and Mrs. David L. Clippinger of Hazlehurst, the 1967-68 Auxiliary President, addressed the House of Delegates.

OFFICIAL ATTENDANCE

The official attendance was announced as being 1,014 to include 541 physicians, 222 members of the Auxiliary, and 251 exhibitors, guests, and others.

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Conduct of Business. Your reference committee commends the Speaker and Vice Speaker for the outstanding manner in which they have conducted business before this House of Delegates. We believe that all members will wish to associate them-

selves in this commendation and an expression of appreciation to these officers.

Dr. Howard A. Nelson has stated that he will not again be on the rostrum as the Speaker of your House of Delegates. Your reference committee feels that it would be remiss if it did not extend to him a special commendation for his long years of service and his faithful and devoted attention to the duties of this office. We ask that all members of this House of Delegates join your reference committee in thanking Dr. Nelson and wishing him well and Godspeed in his new and important endeavors in behalf of us all.

Resolution. Your reference committee desires to offer the following resolution for consideration by this House of Delegates:

WHEREAS, The 99th Annual Session of the Mississippi State Medical Association has been conducted at Biloxi, Mississippi, during the period May 15-18, 1967, and

WHEREAS, The annual session has been most profitable and enjoyable for all who have been in attendance, now, therefore, be it

Resolved, That expressions of deep appreciation are made to the officers, Trustees, and Council on Scientific Assembly for the stimulating and useful scientific program; to the management of all participating hotels, particularly to the Buena Vista, the headquarters hotel; to the press, radio, and television, especially Station WLOX-TV, for coverage of our activities; to the gracious ladies of the Auxiliary who always contribute so substantially to our meetings; to the technical exhibitors and their professional service representatives; to our scientific exhibitors; to our distinguished guests; and to all who shared in the responsibilities of planning, organizing, and conducting this great annual session.

Your reference committee recommends adoption of this resolution.

The report of the reference committee was adopted.

REPORT OF THE ELECTION OF OFFICERS

President-elect: Joseph B. Rogers, Oxford.

Vice Presidents: Ashford H. Little, Oxford; C. G. Sutherland, Jackson; Richard J. Field, Jr., Centreville.

Secretary-Treasurer: Walter H. Simmons, Jackson.

Speaker of the House of Delegates: William E. Lotterhos, Jackson.

Vice Speaker of the House of Delegates: James L. Royals, Jackson.

Associate Editor: Thomas W. Wesson, Tupelo.

Delegate to AMA: G. Swink Hicks, Natchez.

Alternate Delegate to AMA: B. B. O'Mara, Biloxi.

Board of Trustees: John M. Alford, Greenwood, District 1; James O. Gilmore, Oxford, District 2; J. T. Davis, Corinth, District 3.

Council on Budget and Finance: Daniel L. Hollis, Biloxi.

Council on Medical Education: R. Mayo Flynt, Meridian.

Council on Constitution and By-Laws: Arthur E. Brown, Columbus.

Council on Legislation: Paul B. Brumby, Lexington, District 4; George E. Twente, Jackson, District 5; Guy T. Vise, Meridian, District 6. Judicial Council: J. P. Culpepper, Jr., Hattiesburg, District 7; Leo J. Scanlon, Jr., Natchez, District 8; James T. Thompson, Moss Point, District 9.

Council on Medical Service: Charles R. Jenkins, Laurel, District 7; Jack A. Atkinson, Brookhaven, District 8; Bedford F. Floyd, Jr., Gulfport, District 9.

Mississippi State Board of Health: Public Health District 1: G. Spencer Barnes, Columbus; Dewitt Hamrick, Corinth; Luther L. McDougal, Jr., Tupelo; Public Health District 3: George F. Archer, Greenville; John G. Egger, Drew; Fred M. Sandifer, Jr., Greenwood.

Blue Cross-Blue Shield Directors: G. Spencer Barnes, Columbus; R. E. Caldwell, Baldwin; G. Swink Hicks, Natchez; T. E. Ross, Jr., Hattiesburg.

Fraternal Delegates: To Alabama, George W. Moss, Natchez; to Arkansas, Frank M. Acree, Greenville; to Louisiana, B. B. O'Mara, Biloxi; to Tennessee, Stanley A. Hill, Corinth.

CONSTITUTION AND BY-LAWS

At the close of business, there was pending Resolution No. 7, a proposed amendment to Section 6, Chapter V, By-Laws of the association, which would limit consecutive terms of Delegates to AMA to three.

CLOSING CEREMONIES

There being no further business, the Speaker returned the gavel to the President, Dr. Thompson. The Oath of Office was administered to Dr. Temple Ainsworth, the President-elect, by Dr. John B. Howell, Jr., Chairman of the Board of Trustees after which Dr. Ainsworth addressed the House of Delegates.

Dr. James Grant Thompson presented the Thompson Memorial Past President's Pin to Dr. Thompson.

The House of Delegates was adjourned *sine die* at 5:14 o'clock in the afternoon, May 18, 1967.

California Shield Sets Payment Record

The California Medical Association's voluntary prepayment arm, California Blue Shield, formerly known as California Physicians Service, may have set a new record last month in making payments for medical services. The giant organization disbursed \$57 million in satisfaction of about 3.5 million claims in a 30 day period.

The CMA-related organization conducts all Blue Shield activities and acts as the medical association's fiscal intermediary for military Medicare, Part 1-B of Title XVIII, and for the state's Title XIX program. Physicians are compensated for their services under the plan on a basis of usual and customary fees.

The California Title XIX program, operated through the state medical association and its fiscal intermediary organization, is funded at \$904 million per year. It is called Medi-Cal. California also has the largest military Medicare program of any state.

Syntex Names New M.D. Executive

Dr. Albert Bowers has been appointed executive vice president of Syntex Laboratories, Inc., the U. S. subsidiary of Syntex Corp., it has been announced by Dr. Alejandro Zaffaroni, president of Syntex Laboratories.

Dr. Bowers, 36, will direct the staff and operational activities of the marketing, production and administrative divisions of the American subsidiary and continue to serve as a vice president of Syntex Corp. Dr. Bowers has held this latter position in Mexico City since 1965 with special responsibilities for international marketing.

Dr. Bowers joined Syntex in 1956 as a group leader in research. He was successively appointed as associate research director, vice president and director of research for Syntex, S.A. in Mexico, and vice president of the Research Division and director of the Institute of Steroid Chemistry in Palo Alto.

In 1964 he was named vice president of Promotional and Marketing Services. In 1965 this division moved to Mexico City to become the nucleus of the medical and pharmaceutical marketing groups of Syntex International ATSA.

UMC Enters Coronary Drug Research

The University of Mississippi Medical Center is one of eight newly selected centers added to a large-scale clinical trial known as the coronary drug project.

A \$60,000 research grant awarded by the National Institutes of Health to Dr. Leo Elson, clinical assistant professor of medicine at the medical center and Veterans Administration staff physician, will finance the first year of participation.

Some 28 institutions over the country are already working on the study which aims at finding out if drugs can lower the death rate in patients who have survived one or more heart attacks. Long range plans call for the investigation by some 50 centers of more than 8,000 voluntary patients, each of whom will be treated and observed for a five-year period.

SAMA Gives Awards to Top Student, Resident

A senior at Temple University School of Medicine, a resident physician serving with the U. S. Air Force and a resident physician at the University of Miami have won the top awards in the ninth annual competition for the SAMA-Eaton Medical Art Awards.

The national competition provides cash prizes for outstanding medical photographs, photomicrographs and illustrations submitted by medical students, interns and residents. Professional medical photographers and students in medical illustration schools are judged and awarded prizes, in a separate category.

All award winners are incorporated into a traveling Medical Art Salon which is first displayed at the annual SAMA convention, then at the annual meeting of the American Medical Association. After this meeting the Salon is made available for showings at medical schools and hospitals throughout the nation.

First prize winner of the 1967 SAMA-Eaton award in medical illustration is David C. Leber, senior medical student at Temple University, for his drawing titled "Osseous Structure of the Ear—With Associated Nerves."

First prize in medical photography has been awarded to Dr. Arthur T. Skarin, a resident at the 3320 USAF Hospital in Amarillo, for his photo titled "Sarcoidosis."

Volume VIII
Number 9
September 1967



JOURNAL of the
Mississippi
STATE MEDICAL ASSOCIATION

- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
TEMPLE AINSWORTH, M.D.
President
JOSEPH B. ROGERS, M.D.
President-elect
WALTER H. SIMMONS, M.D.
Secretary-Treasurer
WILLIAM E. LOTTERHOS, M.D.
Speaker
JAMES L. ROYALS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

CONTENTS

ORIGINAL PAPERS

- General Concepts of
Vaginitis Therapy **529** HERMAN L. GARDNER, M.D.
- Acute Renal Failure **542** JOHN D. BOWER, M.D., and
ALVIN E. BRENT, M.D.

SPECIAL ARTICLES

- Association
Testimony to the
Clark Subcommittee **535** WILLIAM E. LOTTERHOS, M.D.
and ROWLAND B. KENNEDY
- Radiologic
Seminar LXV **540** RAMON R. LUINA, M.D.
- The Mississippi
Medical College **549** BEN E. KITCHENS, M.D.

EDITORIALS

- Medicare Cost
Question: The
Answer Is More **557** Prices of Goodies? Up!
- Women as Equals?
You Bet! **559** In Executive Jobs
- Professional
Courtesy and
Changing Times **559** Ethical and Practical
- Obstetrics a la
Bankers' Hours **562** When Are They Born?

THIS MONTH

- The President
Speaking **556** Utilization Review
- The Literature **573** New Books Reviewed
- Medical Organization **575** Politics and Poverty
- Meetings **555** New Fall Schedules

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

removes the mental blur



that clouds vision

SOLFOTON®

Each tablet or capsule contains

PHENOBARBITAL.....16 mg.

(Warning: may be habit forming)

BENSULFOID® (See P D R).....65 mg.

Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.

Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING
WITHOUT PRESCRIPTION

AVAILABLE

Solfoton (yellow, uncoated tablets "P")
100s, 500s, 5000s

Solfoton Capsules (yellow and brown)
100s, 500s, 1000s

Solfoton S/C (sugar-coated beige tablets)
100s, 500s, 4000s

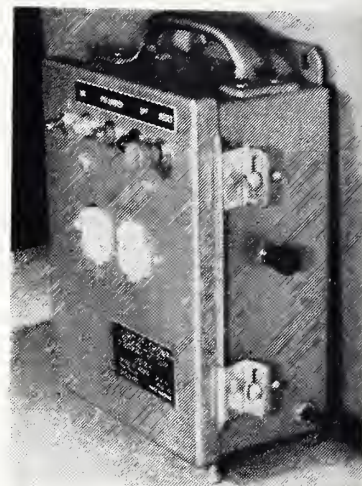
WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856

New Device Offers Electrical Safety

The deliberate explosion of several buildings in Lee, N. H., will highlight a demonstration of a new device for protecting electrical circuits from the effects of accidental grounding, "shorts," and the arc or sparks that often accompany such faults.

All of the nation's 500 fire marshals and several thousands of casualty insurance fire experts, industrial plant engineers, and hospital engineers and administrators have been invited to witness the affair, which will be conducted on the grounds of a research center maintained here by Scientific Electronics Group, Inc.



Circuit-Tron

The development of the Circuit-Tron device makes possible for the first time an electronic "policeman" capable of detecting and instantly arresting the tiniest current beginning to flow through the human body or making its way toward a water pipe, metal door frame, or other source of contact with ground, where a spark would "jump" or arc.

In many industrial plants and commercial establishments using volatile solvents and other materials that generate explosive fumes, the use of electric motors, lighting equipment, and all electrical devices carries inherent hazards. Hospital operating rooms, where ether and anaesthetic gases create special fire and explosion hazards, traditionally employ many stringent special precautions.

The new Circuit-Tron "current cop" effectively eliminates the possibility of spark-induced explosion and fire. It consists of a metal case approximately the size and shape of a large box of corn flakes, and may be installed at the electrical service board to protect an entire home or small business establishment.

So lightning-fast is the fail-safe mechanism of the device, according to its developers, that it cuts off the current before it can begin to produce a spark that would normally ignite explosive fumes. Because of this, it also furnishes reliable protection against shock or electrocution. In a home equipped with the Circuit-Tron device, a radio plugged into a live outlet in the bathroom could fall into a bathtub of water without harming the bather, or

even permitting him to feel the slightest shock.

Standing barefoot on wet ground, demonstrators will grasp live wires protected by the new device—an act that would normally be instantly lethal—in order to display the absolute dependability of the Circuit-Tron system. In the “main feature” of the demonstration, special buildings will be filled with gases and fumes to produce highly volatile and explosive atmospheres. Electrical devices, including some deliberately made faulty in order to produce sparks and arcing, will be operated within the buildings on circuits protected by the new device. Then the Circuit-Tron equipment will be removed from the circuit, and the same electrical apparatus used again, permitting the short circuits and other electrical faults to ignite the vapors and detonate the buildings.

Scientists and engineers from many parts of the United States will attend the demonstrations. Some will contribute the results of studies and analyses that indicate the new Circuit-Tron system will finally eliminate the hazards that have been a part of the electrical age since its very inception, making electric power virtually as safe as the water that flows from the kitchen tap.

Lilly Slashes Oral Penicillin Prices

Wholesale prices of all forms of a widely used oral penicillin—phenoxymethyl penicillin—were reduced by Eli Lilly and Company on Aug. 1. The reductions average approximately 20 per cent for tablets and capsules and about 10 per cent for the liquid pediatric forms.

Phenoxymethyl penicillin is made available under the trademark V-CillinTM; and its potassium salt, under the trademark V-Cillin KTM.

The Lilly company has reduced prices of products containing phenoxymethyl penicillin four times in the last eight years.

The various forms of V-Cillin and V-Cillin K now cost less than half their 1959 prices. For example, the four reductions for tablets V-Cillin K were: 25 per cent in 1960, 15 per cent in 1962, 21.5 per cent in 1965, and 20 per cent in 1967. For pediatric forms of V-Cillin K, they were: 25 per cent in 1960, 16 per cent in 1962, 22 per cent in 1965, and 10 per cent in 1967.

A company spokesman said the experience with V-Cillin follows the normal Lilly pattern of reducing prices of prescription medicines as savings in their production costs are achieved through developmental research.



What can be done for Susan Jane To stop the runs and crampy pain?

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects
intestinal mucosa.

In children, Parepectolin may be used to control diarrhea promptly and prevent dehydration, until etiology has been determined. In some cases, Parepectolin may be all the therapy necessary.



Parepectolin[®]

Each fluid ounce of creamy white suspension contains:
Paregoric (equivalent)..... (1.0 dram) 3.7 ml.
Contains opium ($\frac{1}{4}$ grain) 15 mg. per fluid
ounce.
warning: may be habit forming
Pectin (2½ grains) 162 mg.
Kaolin (specially purified).... (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Children's Dose: One or two teaspoonfuls
three times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

From Mississippi
Blue Cross-Blue Shield:

SOMETHING NEW! SOMETHING SPECIAL!

Designed especially
for **INDIVIDUALS** and **FAMILIES**

- **NEW CONTRACT—BROADER BENEFITS**
- **WIDE CHOICE OF HOSPITAL ROOM ALLOWANCES**
- **HIGHER SURGICAL PAYMENTS**
- **FIRST DAY PAYMENT FOR DOCTOR VISITS IN HOSPITAL**
- **NO ENROLLMENT FEE REQUIRED**
- **JOIN EASILY AND CONVENIENTLY BY MAIL**

(A new health benefit plan for individuals and families who are self-employed or working where less than 10 people are employed.)

NEW BENEFITS FOR HOSPITAL CARE

(\$25.00 DEDUCTIBLE TYPE CONTRACT)

ROOM ALLOWANCE—Choose from:

\$12 per day
\$16 per day
\$20 per day

70 DAYS OF CARE for each hospital confinement when separated by 90 days.

"HOSPITAL EXTRAS" IN FULL

- Drugs and Medicines
- Laboratory Services
- Operating Room
- X-Rays
- and many others (full list in contract)

EMERGENCY TREATMENT for Accidental Injuries (in doctor's office or Hospital Emergency Room)

Complete details in the Blue Cross-Blue Shield
Subscribers Contract

Complete enrollment kits with application cards are now available in most hospitals and many doctors' offices throughout the state. Or we invite you to call, write or go by the Blue Cross-Blue Shield office in Jackson.

**BLUE CROSS
BLUE SHIELD**

MISSISSIPPI HOSPITAL & MEDICAL SERVICE
P. O. BOX 1043
JACKSON, MISSISSIPPI 39205

NEW BENEFITS FOR DOCTORS' SERVICES

SURGICAL-MEDICAL BENEFITS—Choose from:
NEW \$225 Surgical Series with \$4.00 per day for doctor-Hospital visits. (Listing of payments in contract)

or
NEW \$300 Surgical Series with \$5.00 per day for doctor-Hospital visits. (Listing of payments in contract)

JOIN BY MAIL

- No representative will call on you.
- No fee required to join.

FREE INFORMATION

No obligation. Descriptive Literature with benefits and directions on how to join in our attractive information kit. Send for one today.

MAIL COUPON FOR ALL THE FACTS

BLUE CROSS-BLUE SHIELD
P. O. Box 1043, Jackson, Mississippi 39205

Rush me complete information about your new benefit plan.

- ☐ Individual membership ☐ Cancer protection
☐ Family membership ☐ Over age 65 benefits
☐ Increased benefits (my contract number is _____)
(please print)

NAME _____
STREET _____
CITY _____ STATE _____
TELEPHONE NO. _____ AGE _____

PLACE OF EMPLOYMENT _____
NOTE: Check here ☐ if you own or manage a business with five or more employees and wish information about our Employee Group Plan.
MISSISSIPPI HOSPITAL AND MEDICAL SERVICE

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

September 1967

Dear Doctor:

A real breakthrough in retail prescription drug pricing, from the standpoint of the patient, has been announced by a Jackson drug chain. The Patterson Rexall pharmacies will fill Rx for 60 day drug supplies at wholesale plus a professional fee, effecting savings of as much as 40 per cent. Professional fee is on a 20 per cent sliding scale.

Recent study of Rx retail prices in Chicago area showed wide variations, according to AMA News. Big profit bite at retail level is reason why drugs are limited in public care programs. Military Medicare is only nationwide outpatient drug program and is based on wholesale-plus-professional-fee formula.

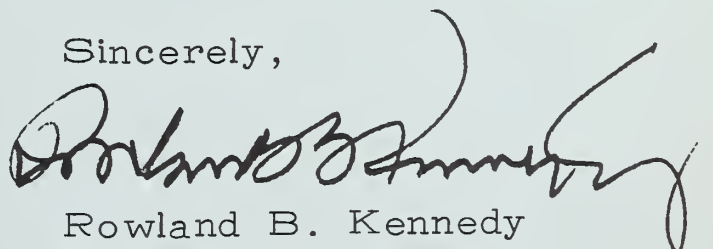
An upcoming New York City murder trial will also be a trial of the psychedelic agent, LSD. A former medical student, Stephen Kessler, charged with the knife death of his mother-in-law, will plead insanity by reason of having taken LSD. Trial may therefore produce landmark legal precedent as to LSD-induced "insanity."

Title XIX has gone to the dogs in New Mexico or, to be precise, to the big seeing eye dogs used by blind welfare clients. Study by state welfare department showed that food and veterinary medical bills for the useful animals were a strain on the indigent blind, so state has put their dogs on welfare rolls at \$15 per month.

FDA officials are asking American drug manufacturers to use the same envelope markings to mail important drug information to physicians. Idea is to get the doctor's attention with uniformity. Three categories of drug information, as now set by FDA, are warnings, prescribing information, and correction of previous drug information.

Death tolls in the "superhazard" sports are on the increase, pointing up popularity growth of danger-for-thrills. Notable fatality increases are occurring in auto drag racing, skin and scuba diving, and in sky diving and sport parachuting. Insurance actuaries say studies show lack of training and discipline among novices account for most such deaths.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

Kansas Hospital Pioneers New Family Practice Residency

Wichita, Kan. - The Wesley Medical Center has begun the new family practice residency program leading to certification in the 20th medical specialty. Program is structured on AAGP's core content curriculum and continues for three years, including a related internship. Training institution officials say that family practice specialists are "trained in breadth rather than in depth."

Mop-Up-Measles Campaigns Are Paying Off

Washington - Joint studies by USPHS and AMA show that measles is being eliminated as a significant disease entity with dramatic gains being scored in the past year. Rubeola cases for first half of 1967 were only 55,700, against nearly 170,000 for comparable period in 1966 and nearly 500,000 in 1964. In Mississippi, 650 cases were reported by State Board of Health for January-August period this year against 980 cases for same period in 1966. Immunologists say that disease can be wiped out by 1970 with continuation of intensive vaccination campaigns.

Regional Variations Show Up In Part 1-B Billing


Baltimore - Social Security Administration spokesmen report that physicians in the east and west are inclined to accept assignment under Part 1-B Medicare while midwestern doctors lean toward direct billing. California's 30,000 physicians top nation with 97 per cent accepting assignments, but in Ohio, 70 per cent of doctors bill patients directly. Other high-assignment areas are New York, New England, and Colorado.

RT's Are Restless, Talk Of Union Organization

Chicago - An industrial relations research organization, commissioned by the American Society of Radiologic Technologists, has discovered "unrest" among RT's and a strong inclination toward unionizing because of low pay. Typical among RT's is a woman in her mid-20's, working five days a week, serving 30 patients a day, all for \$350 to just over \$400 per month. In union organized hospitals, janitors receive \$104 per week against the RT's \$88. The technologists are unusually dedicated, however, because only 13 per cent plan to leave their field.

PHS Finds Urgent Need For Hospital Modernization

Washington - U.S. Surgeon General William Stewart says that over 3,300 of the nation's 6,700 general hospitals need modernization. Of their combined total of 272,000 beds, more than one out of four - 70,000 - ought to be replaced. He said that about 1,300 hospitals have occupancy rates of 80 to 90 per cent, a crowded circumstance. Hospitals running 90 per cent occupancy are said "to exceed the safe limit."



Tissue's healing nicely. Yet anxiety slows his steps toward recovery.

By helping overcome anxiety and tension which can thwart the convalescent's progress, EQUANIL (meprobamate) often may play an important role in medical and surgical aftercare.

Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If an allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leucopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories
Philadelphia, Pa.



Equanil[®]
(meprobamate)
Wyeth

Panel Plan Will Study 'The Pill'

Long-term effects of oral contraceptives will be studied by the Kaiser-Permanente Medical Care Program, Oakland, California under terms of a \$585,000 contract with the National Institute of Child Health and Human Development, one of the National Institutes of Health. The contract was announced today by the Public Health Service, U. S. Department of Health, Education, and Welfare.

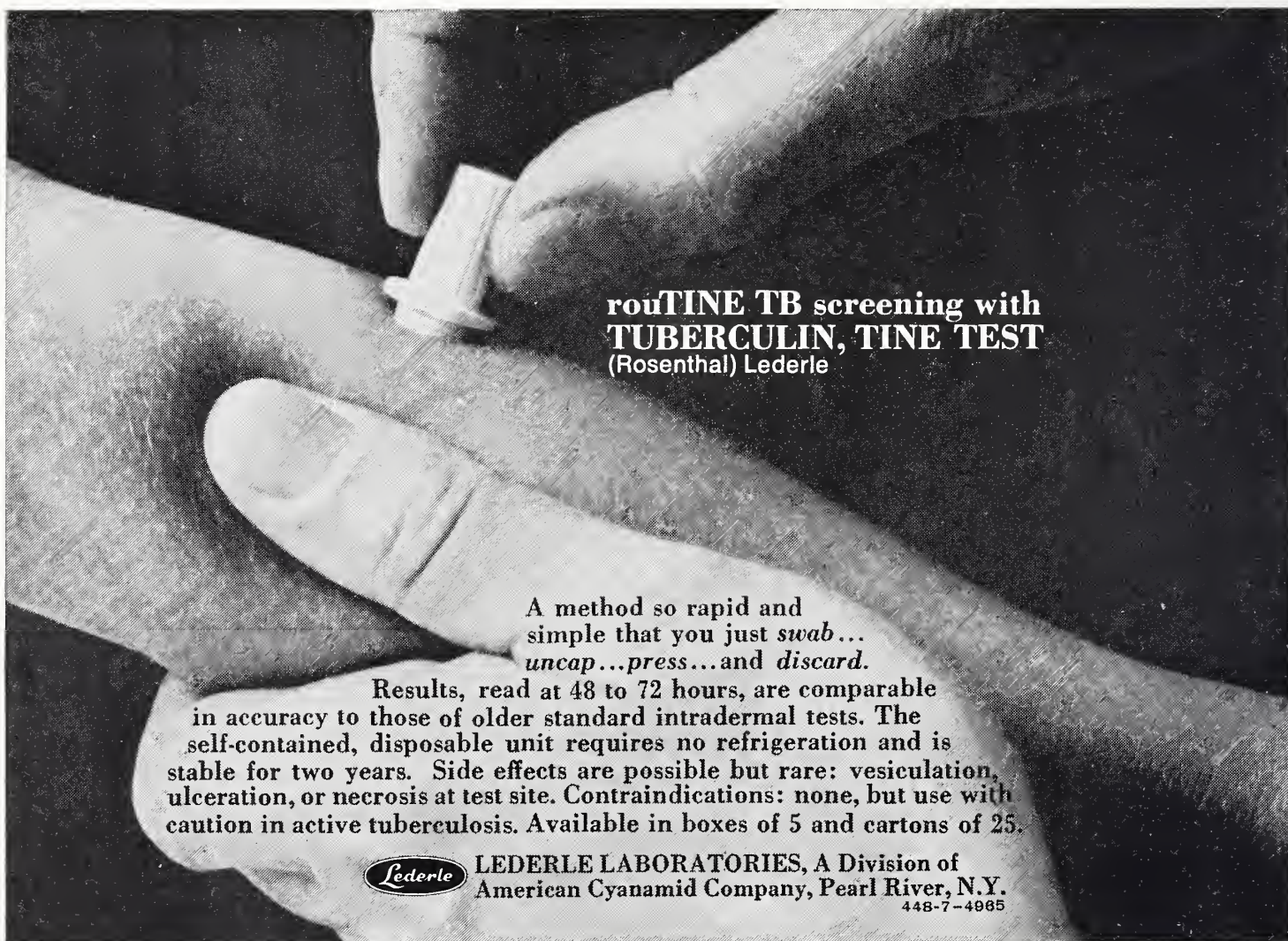
This contract will be the initial phase of a study designed to resolve some of the questions about possible long-term effects on the health of women taking oral contraceptives. Part of the study is to develop a system for continuing surveillance of contraceptive use over a long period of time. The 18-month initial phase will be concerned with organizing and characterizing the study population, collecting and analyzing preliminary data.

More than 15,000 females between the ages of 20 and 54 who have been members of the Kaiser-Permanente Medical Care Program for two or more years and reside in the Walnut

Creek, California service area will be eligible for the study. Female health plan members, who become eligible after the study begins, will be invited to participate. It is expected that about 75 per cent of the eligible women will volunteer to take an active part in the project.

The women will be categorized as to their use of contraceptive drugs. Their past medical history will be extracted from computerized records already available. They will be given extensive physical and gynecological examinations upon entering the study and will be examined at regular intervals thereafter. As part of the examination, they will undergo a comprehensive battery of laboratory tests in a specially designed automated laboratory. The results will be analyzed by a computer programmed to automatically advise additional tests and follow-up visits to physicians when necessary.


There is some controversy among scientists as to the mode of action and the immediate and long-term physiological effects of the oral contraceptive drugs. A wide variety of adverse effects has been reported as occurring in the users of these drugs, but such effects are not peculiar to those taking the drugs, since they also occur in a wide variety of other circumstances in individuals.



**rouTINE TB screening with
TUBERCULIN, TINE TEST**
(Rosenthal) Lederle

A method so rapid and simple that you just *swab... uncap...press...and discard.*

Results, read at 48 to 72 hours, are comparable in accuracy to those of older standard intradermal tests. The self-contained, disposable unit requires no refrigeration and is stable for two years. Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in boxes of 5 and cartons of 25.

 **LEDERLE LABORATORIES**, A Division of
American Cyanamid Company, Pearl River, N.Y.
448-7-4985



ORIGINAL PAPERS

General Concepts of Vaginitis Therapy

HERMAN L. GARDNER, M.D.

Houston, Texas

WITH A MORE COMPLETE knowledge of the causes of vaginitis and with specific agents for therapy, practically every patient can be assured a good chance of successful treatment. Surveys of prescription volume show that the largest sales of vaginal medicaments are those designed and advertised for treatment of vaginitis without regard for etiology. The use of these shotgun proprietaries is understandable only for physicians who do not own a microscope. My first appeal is that a specific diagnosis be made and the most appropriate medication be prescribed.

This discussion will be limited primarily to the common infections, namely, trichomoniasis, candidiasis, and *Haemophilus vaginalis* vaginitis. In a private office practice, these three infections compose over 98 per cent of all vaginitis and until candidiasis became epidemic a few years ago, they were of about equal prevalence.

I should like to make preliminary comments on so-called "nonspecific" vaginitis. This is a wastebasket diagnosis used for a large group of leukorrheas to which a specific cause cannot be assigned. It is like saying idiopathic or unknown. To classify all vaginitides without obvious etiology as "nonspecific" is totally unacceptable today. To classify vaginitis as "nonspecific" because no trichomonads or *Candida* are present is equally unacceptable.

From the Department of Obstetrics and Gynecology, Baylor University College of Medicine.
Read before the Section on Obstetrics and Gynecology, 99th Annual Session, Mississippi State Medical Association, Biloxi, May 15-18, 1967.

This would be diagnosis by exclusion, a common practice.

I am firmly of the opinion that over 90 per cent of vaginitides previously classified as "nonspecific" are in reality caused by a short gram-negative bacillus belonging to the genus *Haemophilus*, now

In a private office practice, trichomoniasis, candidiasis and Haemophilus vaginalis infections account for over 98 per cent of the cases of vaginitis, states the author. He discusses the diagnosis and treatment of vaginitis, concentrating primarily on these three infections. He maintains that with a more complete knowledge of the causes of vaginitis and with specific agents for therapy, practically every patient can be assured a good chance of successful treatment.

commonly known as *Haemophilus vaginalis*. Continued investigations since the original report on this condition in 1954 have only added confirmation to the original claims and some 25 or 30 investigators have corroborated the findings originally published. A rare dissenting vote is not disturbing since within the last five years papers have been published which place question upon the pathogenicity of *Trichomonas vaginalis*.

Often, upon culture, such organisms as strep, staph, proteus, pseudomonas, and *Escherichia coli* are isolated from the vagina, but the relationship

VAGINITIS THERAPY / Gardner

of these bacteria to the discharge or vaginitis present is often highly questionable, particularly since clinical patterns for infection from such causes have never been individually characterized. The finding of a predominant bacterial organism in a culture or smear does not prove it to have a pathogenic relationship to the condition observed. An unnatural predominance of a vaginal organism often means nothing more than a temporary imbalance of flora as might result from recent antibiotic therapy or overzealous use of vaginal medications. Beta strep vaginitis, sometimes observed in the estrogen deficient patient, is perhaps the most common exception.

An occasional patient is seen who supposedly has intractable vaginitis from a bacterial infection, but often such patients have the "overtreatment syndrome"—"the more she was treated, the worse she became." For these cases expectant treatment or perhaps cooling lotions or wet dressings is usually all that is required because time will allow for the return of normal tissues and normal flora and obviate the need for any further active treatment.

A purported effective method of vaginitis therapy, long perpetuated in gynecologic literature, is to restore vaginal physiology, flora, and acidity to normal. The claim has been that this method results in eradication of vaginal pathogens and cure of vaginitis. While superficially the idea is ingenious, its proponents have failed to provide the necessary instructions for its attainment. Experience has shown that restoration of a normal flora and pH occurs as a result of vaginitis cure rather than the converse.

LACTOBACILLI INSTILLATION

Reports have appeared sporadically claiming that vaginitis, regardless of etiology, can be successfully treated by the instillation into the vagina of commercially cultured lactobacilli. This, no doubt, is one of the proposed methods for reestablishment of normal flora and pH. The chief objection to instilling lactobacilli as a mode of therapy is that it simply doesn't cure vaginitis. It doesn't even restore a lactobacillus flora, much less eradicate specific pathogens. Theoretically it shouldn't work, for one need only remember that when the pathogen gained initial entry into the vagina to produce infection, the patient, in all probability, had a normal lactobacillus flora and of a strain well adapted to her vagina, rather than a test tube.

Another common recommendation for vaginitis therapy is the use of estrogens. Any such proposal has to be based on theory rather than experience because the argument against is much stronger than the argument for their use in the common infections. Regardless of the route of administration, estrogens do not contribute to the cure of infectious vaginitis in women with normal ovarian activity. To my knowledge, estrogens are beneficial only in certain types of pediatric and postmenopausal vulvovaginitis both of which are associated with an atrophic vagina.

ESTROGEN DEFICIENCY

The symptomatic case of trichomoniasis, candidiasis, or *Haemophilus* vaginitis rarely occurs in children or estrogen deficient women. On the other hand, the postmenopausal woman who is harboring the agent of one of these infections in an asymptomatic or carrier stage has an excellent chance of developing symptomatic vaginitis when she is administered sufficient estrogens. These three common specific infections are, therefore, primarily diseases of women of the childbearing age. The estrogen level and the severity of the vaginitis tend to parallel each other and this is a fact exemplified over and over again in obstetrical patients in whom the estrogens are high and the vaginitis severe.

Since recorded history, the vaginal douche has been an accepted form of vaginal therapeutics. Perhaps mechanical cleansing of the vagina of menstrual blood, semen, desquamated debris and mucus will protect the patient to some degree against reinfections, but it is highly improbable that the vaginal douche ever has a curative effect. However, the use of medicated or acid douches by the patient with vaginitis, in whom we have failed to make a correct diagnosis and prescribe appropriate treatment, warrants no criticism of the patient by the physician. Douches frequently afford temporary removal of malodorous secretions and temporary relief of subjective symptoms.

Before the discovery of an effective systemic agent for the treatment of trichomoniasis, a douche by the patient once or twice daily was an almost essential part of her hygienic care to prevent the recurrence of symptomatic disease. A healthy vagina is not benefited by douching, but any patient with the longstanding habit of postcoital or postmenstrual douching should not be denied the privilege any more than an old lady should be denied a glass of hot lemon-water before breakfast to stimulate evacuation.

In recent years there has been a noticeable

trend to blame exacerbations of vaginitis and perhaps the disease itself, in some instances, upon emotional instability and upheavals. While I cannot deny that emotional upsets can precipitate flare-ups of infectious processes such as herpes and possibly trichomoniasis, I must strongly oppose the claim that trichomonads can be normal inhabitants of the vagina and become opportunistically pathogenic only when a woman is emotionally disturbed. I cannot accept the statements or implications that symptomatic trichomoniasis occurs only in patients suffering from a significant degree of "psychobiologic stress."

Advocates of this theory invariably use trichomonacides in conjunction with their psychotherapy and tranquilizers. It seems more reasonable to assume that emotional problems are the result rather than the cause of vaginitis. And, could it not be that the emotional and fastidious are more likely to experience subjective symptoms and to seek medical attention? The obvious notwithstanding, who has observed the microbiologically cured and sexually abstinent patient develop a recurrence of trichomoniasis or *H. vaginalis* vaginitis?

It has been my observation that patient's emotional component is more easily handled after the vaginitis has been cured. Regardless of emotions, the patient is always cured of her trichomoniasis or *H. vaginalis* vaginitis upon eradication of the causative organism, and any recurrence thereafter must be reinfection. Psychotherapy appears to have no direct therapeutic effect upon the organic disease, and as far as I am personally concerned it can be forgotten as a part of the essential therapy.

TRICHOMONIASIS IS VD

Trichomoniasis must be accepted as a venereal disease with all its epidemiologic implications. Trichomoniasis is not just vaginitis because the organisms infect as well Skene's ducts and the para-urethral glands and ducts of both sexes. There remains a strange reluctance to admit that in the majority of cases the male conjugal partner harbors trichomonads in the urethra. It is now evident that uniformly successful therapeutic results must depend upon total eradication of every organism from all foci of both sexual partners, and there is no proof that foci exist outside of the genital and urinary tracts. Topical agents, since they fail to reach the foci, probably give microbiological cures in less than 10 per cent of cases.

The development of Flagyl® (metronidazole) six or seven years ago, marks one of the real milestones in gynecology. The obtainable cure rate is

almost 100 per cent. We use 500 mg. (two tablets) every 12 hours for five days, and husbands are given the exact dosage and not one tablet (250 mg.) twice a day for 10 days as recommended. To give a larger individual less dosage than the wife seems like idiotic therapeutics.

Our experience with several hundred women treated with Flagyl does not suggest that it ever precipitates vaginal candidiasis as was reported in some of the early studies. The agent does not appear to either encourage or suppress the growth of candidal organisms and certainly it is not to be placed in the same category with broad spectrum antibiotics in this regard.

FLAGYL IN PREGNANCY

Although the Food and Drug Administration has not approved the use of Flagyl in pregnancy, no evidence exists to my knowledge that it has any detrimental effect on either the mother or the baby. I am unaware of a single instance of reported fetal injury attributable to Flagyl although hundreds of pregnant women treated have been reported.

An interesting observation made by some investigators has been that the trichomonads were eliminated but that often a malodorous discharge persisted. There is a simple explanation for persistence or the early post-treatment appearance of a gray homogeneous malodorous discharge, and it is not to be interpreted as a treatment failure for Flagyl unless trichomonads are demonstrable. Approximately 25 per cent of patients with trichomoniasis have an associated *H. vaginalis* vaginitis, and the organism is unaffected by Flagyl. Therefore, without proof, it should not be assumed that treatment failure exists because of a residual discharge which resembles that of trichomoniasis.

The number one vaginitis problem today is candidiasis and not trichomoniasis as was the case a few years ago. Of academic interest is that only a certain percentage of candidiasis is caused by *Candida albicans*. I don't know the prevalence of the various species of *Candida* in Eskimos, but nonpregnant white women in Houston with candidiasis yield a species other than *albicans* in over 50 per cent of the cases. These would include *C. tropicalis*, *C. pseudotropicalis*, *C. stellatoidea*, *C. krusei*, and even *C. guilliermondi*. We also have evidence that the yeast *Torulopsis glabrata* is an occasional mild pathogen, but it does not produce vulvovaginitis comparable in severity to candidiasis.

A point of practical importance is that the finding of candidal organisms by smear or culture in

VAGINITIS THERAPY / Gardner

the vagina of a patient without symptoms or subjective evidence of infection does not warrant a diagnosis of and treatment for candidiasis. Fewer than 50 per cent of women who yield candidal organisms have clinical disease at the time of testing. This means, of course, that the organism is strictly an opportunistic pathogen. As more and more is learned of fungus infections, the more obvious it becomes that predisposing host factors are essential before clinical disease develops.

Pregnancy is the most common predisposing factor with the incidence and severity increasing with the duration of gestation. Following delivery the precipitous drop of estrogen and progesterone levels results in radical changes in vaginal metabolism, chemistry, and cytology, and in most cases a rapid disappearance of the clinical signs of the disease. The new vaginal environment is so extremely unfavorable that negative cultures are obtainable within a few days of delivery. The use of large doses of estrogens to inhibit breast engorgement might alter this postpartal sequence of events.

The incidence of candidiasis increased with the introduction of antibiotics, and the increasing frequency has paralleled their increased usage regardless of the route of administration. The mechanism whereby this occurs cannot be discussed at this time.

Other than pregnancy, the contraceptive pill is the most important predisposing factor to the development of candidiasis. As an example of this, of 121 consecutive non-pregnant patients with candidiasis recently observed by me, 62 or 51 per cent were on oral contraceptives. Statistical methods applied to these figures indicate that women on the pills have a ten-fold greater chance of developing candidiasis than a similar group of women not on the pills. The explanation for this increased incidence seems rather simple. Estrogens cause deposition of glycogen in the intermediate cells of the vagina and progestogens cause a shedding or desquamation of these cells, making the glycogen available to the candidal organisms.

DIABETES AND CANDIDIASIS

In diabetes, there is an increased concentration of glucose in the tissues, blood and urine, and glucose also encourages growth of *Candida*. To the diabetic, candidiasis is a real problem. Nevertheless, diabetes is of small importance in the overall picture of vaginal candidiasis because such

a small percentage of patients observed have diabetes. Other predisposing factors include non-diabetic glycosuria, obesity, poor dietary habits, and debilitation.

Persistent or recurrent candidiasis is not uncommonly observed in patients in whom none of the above described factors can be demonstrated. The unknown predisposing factors are probably multiple and involve both host susceptibility and pathogenicity of the fungus present. The existence of these undefined predisposing factors X are apparent to all who are intimately concerned with this disease.

MALE INFECTION

While it is true that men are more likely to be recipients than donors of candidiasis, men do frequently harbor the organisms beneath the foreskin and on the genitocrural tissues and serve as a reservoir of reinfection for women.

As already stated, the finding of candidal organisms in the absence of signs and symptoms of vaginitis does not constitute an indication for treatment. The only practical method of treatment today is by the topical application of candidicidal agents. The intravenous use of amphotericin B is too dangerous to use for the purpose of vaginitis. Many treatment failures can be attributed to the short period of therapy prescribed by the physician, and many other failures to the immediate discontinuance of therapy by the patient upon relief of symptoms.

Irregular and erratic use of medications such as discontinuing treatment with menses must account for additional failures. Patient instructions should be specific and preferably should be given in writing. It is true that patients want quick and easy cures and long courses of treatment will be interrupted often unless the instructions are meticulously detailed. It is my opinion that most preparations other than gentian violet should be inserted into the vagina once or twice daily for a minimum of 30 days.

Gentian violet is one of the oldest and most reliable of all forms of treatment. The two legitimate objections to gentian violet are its staining characteristics and the frequent chemical vulvovaginitis which occurs when the preparation is used too often. Other popular agents are available but they have varying degrees of effectiveness. These include Mycostatin®, Candepin®, Sporostacin®, and Propion® gel.

Most physicians are aware of the increasing incidence of chronic and recurrent candidiasis. No uniformly successful approach to the problem has been found, but obviously, besides destroying the

vulvovaginal organisms, every effort must be made to eliminate or control the predisposing factors. Until more is known concerning host factors, problem cases will continue to exist in large numbers. These are suggestions for the chronic recurrent case.

The period of continued therapy should be increased beyond that recommended for the routine case. Consideration should be given to using a candidicide intravaginally for seven to ten days before each menstrual period. Intravaginal candidicides should be used during and for several days after any course of antibiotic therapy. When oral tetracycline or its congeners are used in patients susceptible to *Candida*, perhaps the medication should be given in combination with nystatin or amphotericin B in order to inhibit growth of intestinal organisms.

Theoretically the application of a candidacidal cream to the vulva should prevent entry of large numbers of new organisms into the vagina. The practical value of this, however, is unproved. Oral candidicides such as nystatin are not absorbed from the intestinal tract, so have no direct beneficial effect on vulvovaginal candidiasis. However, based on the assumption that the majority of vaginal reinfections arise from the intestinal tract, the use of oral nystatin in an attempt to eliminate or reduce the candidal population of the intestinal tract might be worth a trial.

ORAL CONTRACEPTIVES

Joseph Scott of Miami feels that antiseptic soaps destroy bacteria on the vulva which normally protect against *Candida*. Patients with chronic or recurrent infection should be investigated for either active or latent diabetes. Because of the potentiating nature of the estrogen-progestogen preparations used in contraception, many times it is necessary to discontinue birth control pills before a cure is possible. It has been said that the sequentials are less predisposing than the combined type of tablet. This may be true but the sequentials also predispose to the infection. Special attention to the foreskin of the clitoris might be helpful. Smegma might harbor the organisms. Use of a candidacidal cream is suggested for this purpose. Husbands, particularly the uncircumcised ones, should be considered possible sources of reinfection and perhaps the application to the penis of a candidacidal cream or ointment for a week or 10 days might be helpful.

Although *Candida* is recoverable from about 30 per cent of oral cavities, the importance of cunnilingus as a factor in reinfection has not been

established. Perhaps the douche nozzle should be sterilized and the shower substituted for the tub. Commonly during pregnancy and to a lesser degree in the nonpregnant, the disease may be obstinate to the point that it becomes necessary for the patient to insert a candidacidal tablet into the vagina every two or three days for an indefinite period. After all these precautions and therapeutic practices, recurrences will still be observed.

NONSPECIFIC VAGINITIS

In my opinion, *H. vaginalis* vaginitis accounts for approximately 90 per cent of so-called non-specific vaginitis. Characteristically the disease displays a gray, homogeneous, malodorous discharge with a range of pH 5.0-5.2. Since the organism is a surface parasite which lives upon vaginal secretions and debris and has no tendency to invade living tissues, it is rarely, if ever, associated with gross tissue changes and pruritus. Nevertheless, the disease, unlike that of trichomoniasis and candidiasis, remains unchanged from week to week and from year to year.

Because of the absence of gross evidence of inflammation, there are those who claim that the entity should not be classified as vaginitis. The argument has some merit perhaps, but the classification vaginitis should be retained until a better one has been suggested and accepted. *H. vaginalis* vaginitis is productive of a malodorous discharge which is distinctly abnormal; it is a disease, it is an infection, it is sexually contagious, and the clinical and laboratory patterns are uniformly characteristic even more so than that of candidiasis and trichomoniasis.

The infection is acquired mainly by sexual contact and for this reason must be classified as a venereal disease. We have cultured the urethras of over 100 husbands of infected wives and have found that over 90 per cent of these husbands harbor the organism as the predominant bacterium of the urethra. The infection is easily transmitted to a healthy vagina by inoculation with materials from an infected vagina. Approximately one-third of a group of subjects with normal vaginas, when inoculated with pure cultures of *H. vaginalis*, will acquire the classical disease. Within 10 days after inoculation of the susceptible subject, the vagina will display all of the characteristics of *H. vaginalis* vaginitis and *H. vaginalis* soon outnumbers all other organisms at least 100 to one, and pure cultures are not uncommon.

H. vaginalis vaginitis can usually be cured by the twice daily intravaginal use of sulfonamides,

VAGINITIS THERAPY / Gardner

Terramycin® suppositories, or Furacin® cream. Inasmuch as most husbands of infected wives harbor the organism, they are a constant source of reinfection and must be treated simultaneously with oral antibiotics if frequent recurrences are to be avoided. Oral sulfonamides are relatively ineffective. In order to effect a lasting cure, it is often necessary to treat both the patient and her sexual partner simultaneously with large oral doses

of one of the tetracyclines or ampicillin for a minimum of five days.

Even this measure does not assure a cure. Antibiotic sensitivity appears to be highly variable from strain to strain. Recurrence of the disease after simultaneous microbiologic cure of both sexual partners suggests reinfection and third party contact. The epidemiologic aspects of the disease are identical with those of trichomoniasis, although it does appear to be more readily transmitted than trichomoniasis. ★★★

6436 Fannin (77025)

LAUGHING OUT OF ISRAEL

The six day war in the Middle East and the defeat of the Russian-backed Arab states has produced more than an expected share of stories. . . . One making the rounds in Washington is that the President has offered the Israelis a trade of Secretary of Defense McNamara, 100 Cadillacs, 100 new fighter aircraft, and George Hamilton in return for General Moshe Dayan. . . . Another rumor is that the Israeli high command would consider taking over the Vietnam situation for cost plus 10 per cent.



Association Testimony to the Clark Subcommittee

WILLIAM E. LOTTERHOS, M.D., and ROWLAND B. KENNEDY

Jackson, Mississippi

A BIZARRE SUCCESSION of events alleging unbelievably poor conditions of nutrition and health among Negro children in Mississippi culminated in hearings by the Senate Subcommittee on Employment, Manpower, and Poverty where the Field Foundation report was accorded national publicity. The six physician-authors leveled acrimonious charges at Mississippi, its state government, medical profession, and citizens.

Led by Sen. James O. Eastland and Sen. John Stennis, a team of Mississippians responded with positive testimony, both from government and medicine. The association presented testimony on the urging and with the support of the senators and Governor Johnson.

The full text of the principal testimony, given *verbatim* at the hearings, and the supplemental testimony, filed later, are presented as a special report to the membership:

We are grateful for the opportunity of appearing before your Subcommittee to discuss our association's views with reference to the report on the health status of children submitted to the Field Foundation by six physicians.

Our state medical association is a scientific professional society of licensed physicians which was founded in 1856. We are both deeply interested and deeply committed to rendering the best possible health care for all citizens of our state, and we welcome the opportunity to discuss our views in this general connection as well as in the

specific circumstance of the Field Foundation report.

As physicians, we are profoundly concerned over any illness in any individual, and we stand ready to summon our full resources to render care to anyone with medical need without regard to the ability to pay. Under a number of state health

Stressing that nutritional diseases do not "constitute a major health problem" in Mississippi, the state medical association's witnesses at the "hunger hearings" presented clinical findings from a study made among 502 general practitioners and 67 pediatricians in the state.

Of the charges in the Field Foundation report, they said that "we find no basis upon which to document the morbidity described." Lack of substance in the Field team's charges brought a response of their report lacking in "scientific credibility."

care programs, including those in the charity hospitals, those which provide the indigent hospital services in their home communities, and in the various clinic programs, Mississippi physicians serve without compensation. We have, as a state medical association, energetically supported the enactment of additional and expended programs of care, among which were the Kerr-Mills program and the more recently available Title XIX program as established in Public Law 89-97.

It is, therefore, only logical that we should be concerned and distressed over the Field Foundation report. We regret most sincerely that the investigating team of physicians did not call on

Speaker, House of Delegates, and former chairman, Council on Legislation, Mississippi State Medical Association.

Executive Secretary, Mississippi State Medical Association.

Presented before the Senate Subcommittee on Employment, Manpower, and Poverty, Washington, D. C., July 11, 1967.

our association or permit us to confer with them. We regret also that the report, according to the copy we have secured, contains no statistical data for quantitative analysis of the extent and scope of epidemiology described.

We are also interested in having the opportunity to examine information as to laboratory findings upon which the diagnoses were based, since we physicians can establish a diagnosis of anemia and parasitic infection only after appropriate laboratory tests. We hope that these data, and the names of the patients, will be made available to your Subcommittee so that all may have the benefit of the foundation's investigators' findings. I can assure you that the medical community in our state will contribute to the maximum possible extent in assisting in treating all such conditions.

We can assure your Subcommittee and the Field Foundation investigators that medical care is available, and this most emphatically includes those children who were said to be receiving none. If referral to care sources is a problem, we shall also be interested in its extent. This is by way of underscoring that many of the children described must surely be eligible for benefits under Title IV of the Social Security Act, Aid to Needy Families with Children, and our Department of Public Welfare reports that there are now some 66,000 beneficiaries together with about 25,000 caretakers. In each instance, the county department of social welfare can be of assistance, and each such department works closely with the local medical community. We believe also that the 82 county health departments with their corps of 300 public health nurses and physicians will surely not overlook any potential for service.

FOOD PROGRAM

As a state medical association, we are regrettably unable to address ourselves to the matter of food distribution among disadvantaged persons. We are aware, however, of the monumental task undertaken by state and county authorities to establish such a program in each of our 82 counties. We can state that in the clinical experience of a major sample of our association members, nutritional diseases are not observed with sufficient frequency or in degrees of severity so as to constitute a major health problem.

Our experience in examining children for the Head Start program, and these medical records are available and currently on file in public health facilities, disclosed no statistically signif-

icant findings in the area of nutritional disease.

In addition to care accessibility, there exists in our state care capacity in existing, operational medical facilities. Our 9,200 general medical and surgical beds in nonfederal, short-term hospitals gives our state a bed-to-population ratio of 3.26 beds per 1,000. The U. S. Public Health Service reports that this ratio ranges from a low of about 3.0 to a level slightly over 3.5 beds per 1,000 in the several states. We are, therefore, situated in a median posture, and our hospital construction program continues to progress satisfactorily. Under USPHS criteria, we have 100 per cent of our needs in tuberculosis beds and about 80 per cent of need in acute, short-term beds. It should be kept in mind that this is a better posture than half of the states currently enjoy.

MORE MEDICAL GRADUATES

Our University of Mississippi School of Medicine has graduated its 11th class of physicians, degree nurses, and those achieving the doctoral level in allied health sciences. We are encouraged that the state has initiated a forward thrust to initiate a consolidation of care for all needy citizens through a soundly conceived Title XIX program.

It has been, is now, and will continue to be the goal of the Mississippi State Medical Association to discover and eliminate to the extent possible any deficit in health care services. In this specific connection, we called upon our own resources with reference to the disease entities described in the Field Foundation report. Since this document is structured in nonquantitative general terms, we undertook the task of surveying a substantial sample of our association to secure a reliable measure of the frequency with which these conditions are seen.

A universe of 502 general practitioners and 67 pediatricians was selected, and a survey questionnaire was mailed to them on June 28, 1967. With the questionnaire was a letter from our president, Dr. Temple Ainsworth of Jackson, requesting that clinical data be supplied in the following areas:

TABLE 1
SURVEY RESPONSE

Group Surveyed	Usable Per Cent		
	Universe	Replies	Returns
General Practitioners	502	190	38
Pediatricians	67	28	42
Total Surveyed	569	218	40

- (1) The number of children under age 12 seen weekly;
- (2) Whether the individual physician's practice includes nonwhite children;
- (3) The number of children seen weekly with nutritional anemia, sickle cell anemia, anemia secondary to infection, nutritional disease, vitamin deficiency disease, debilitating parasitic disease, cardiac and orthopaedic conditions amendable to surgery, and nephritis.

We asked also if the respondent physician knew of his own personal knowledge whether any child has been refused medical care.

Our findings through July 7, 1967, have been summarized for your Subcommittee as statistical presentations appended to this statement. Table 1 demonstrates the excellent response received in

TABLE 2
GENERAL PRACTITIONERS' PRACTICE CHARACTERISTICS

Characteristics	Number	Per Cent
Treat children of all races	187	98.4
Do not treat children of all races . . .	3	1.6
See weekly children under 12:		
1-10	2	1.1
11-20	29	15.3
21-40	64	33.7
41-60	43	22.6
Over 60	52	27.3
Do you know of any child denied medical care?		
Negative*	188	98.9
Affirmative	0	0.0

* Two respondents did not answer.

nine days during which two weekends intervened. An overall response of 40 per cent of usable replies was received which included 38 per cent of the general practitioners and 42 per cent of the pediatricians.

We were not astonished to discover that 98.4 per cent of the respondents treat children of all races. We found that general practitioners are seeing about 50 children under 12 years of age weekly, based on the median demonstrated in Table 2. Half of the respondent general practitioners are seeing from 41 to more than 60 children weekly.

Among the pediatricians, almost 90 per cent are seeing more than 60 children weekly, as shown in Table 3.

Clinical findings as to the specific conditions show that nearly a third of the general practition-

TABLE 3
PEDIATRICIANS' PRACTICE CHARACTERISTICS

Characteristics	Number	Per Cent
Treat children of all races	28	100.0
Do not treat children of all races . .	0	0.0
See weekly children under 12:		
1-10	0	0.0
11-20	0	0.0
21-40	2	7.1
41-60	1	3.6
Over 60	25	89.3
Do you know of any child denied medical care?		
Negative	27	96.3
Affirmative	1	3.6

ers see no nutritional anemias, and only 12 per cent among them see five cases weekly. Occurrence of sickle cell anemia is even less frequent. The relatively low incidence of anemia secondary to infection and nutritional disease appear to coincide with prevailing and expected morbidity patterns. Cardiac and orthopaedic conditions were even fewer. These data are presented in Table 4.

Table 5 is remarkably consistent with Table 4, showing that pediatricians are having virtually the same clinical experience as the general practitioners in case findings of the conditions described.

We were glad to receive much constructive subjective comment in the study with a number of references to Head Start examinations. Since these number in the thousands, the same consistent findings—and these are disadvantaged children by federal criteria—tend to support strongly the data from the clinical experience study. None of these data are inconsistent with morbidity reports of the

TABLE 4
GENERAL PRACTITIONERS' CLINICAL FINDINGS

Condition	Conditions Seen Weekly			
	NONE	1-2	3-4	5 PLUS
Nutritional Anemia	61	78	27	24
Sickle Cell Anemia	171	18	1	0
Anemia Secondary to Infection	118	59	6	7
Nutritional Disease	132	45	8	5
Debilitating Parasitic Disease .	116	59	7	8
Cardiac and Orthopaedic Con-				
ditions	161	29	0	0
Nephritis	162	26	2	0

public health authorities, and while we do not suggest that the Field Foundation report of the obser-

TABLE 5
PEDIATRICIANS' CLINICAL FINDINGS

Condition	Conditions Seen Weekly			
	NONE	1-2	3-4	5 PLUS
Nutritional Anemia	9	9	6	4
Sickle Cell Anemia	22	6	0	0
Anemia Secondary to Infection	14	12	1	1
Nutritional Disease	23	2	1	2
Debilitating Parasitic Disease .	21	5	1	1
Cardiac and Orthopaedic Con- ditions	21	4	3	0
Nephritis	25	2	1	0

variations in six counties over four days is necessarily an aberration among independent, documented morbidity data, we find no basis upon which to document some of the contents of the report as to occurrence of morbidity described. We, therefore, reiterate our hope that the Field Foundation survey team will supply your Subcommittee with precise data and laboratory findings, as is the practice in establishing scientific credibility.

We are grateful for the opportunity to present these views, and our association will stand ready to respond promptly to your Subcommittee in supplying any further information or amplification of this statement which may be desired.

On July 14, the association filed supplemental testimony with the Clark Subcommittee for inclusion in the printed record of the hearings. The opportunity to present additional information came when the chairman questioned the association's witnesses after presentation of the formal testimony.

Because of Dr. Lotterhos' temporary absence from the state when the supplemental testimony was filed, the author, acting for Dr. Lotterhos and the association, was Mr. Kennedy:

SUPPLEMENTAL TESTIMONY

On behalf of Dr. William E. Lotterhos and myself, whose privilege it was to appear before your Subcommittee during the hearings on July 11 in our capacity as witnesses representing the Mississippi State Medical Association, please accept our appreciation for your courtesies and consideration.

When you questioned me with reference to the incidence of nutritional disease and other conditions seen in Mississippi children under age 12, you asked me to furnish you information as to

such incidence in the Mississippi Delta. I replied that our survey had each respondent physician identified by county and that this information would be furnished to you. I have prepared it in two tables, numbering them Tables 6 and 7 so that they will chronologically follow Tables 1 through 5 appended to our testimony.

During the hearings, the Delta area was not precisely defined by the various witnesses, but I believe that most present understood in general terms what geographic area of the state it includes. For the purposes of this additional statistical information, I have included the counties of Bolivar, Coahoma, Holmes, Humphreys, Leflore, Quitman, Sunflower, Tallahatchie, Tunica, and Washington, a 10 county area.

TREAT ALL RACES

The response received from the Delta area is thoroughly representative of that from the state at large. Table 6 shows that all 32 respondent physicians treat children of all races and that none restricts his practice with reference to race. This is 100 per cent for the Delta against 98.4 per cent for the entire state.

TABLE 6
DELTA PHYSICIANS' PRACTICE
CHARACTERISTICS

Characteristic	Number	Per Cent
Treat children of all races	32	100
Do not treat children of all races ...	0	0
See weekly children under 12:		
1-10	0	0
11-20	5	15.6
21-40	6	18.7
41-60	7	21.9
Over 60	14	43.8
Do you know of any child denied medical care?		
Negative	32	100
Affirmative	0	0

Thus, I can answer your fourth question (as the record will show) first, and this had reference to the charge that "white physicians will not treat Negro patients." One hundred per cent of the Delta physicians represented in our studies treat patients of all races. As Executive Secretary of the Mississippi State Medical Association for 16 years, I can affirm this to be true from personal knowledge, also.

A second important finding among Delta physicians is that none reports that any child has been

denied medical care. Again, I am glad to affirm this finding from my own knowledge and experience over the years.

Almost half of the Delta physicians see more than 60 children under 12 weekly. Some who do pediatrics report seeing over 200 weekly. Less than half see more than one or two cases of nutritional anemia each week among all their patients, and a fourth see no cases. Only about 12 per cent of the physicians see five or more cases weekly.

TABLE 7
DELTA PHYSICIANS' CLINICAL FINDINGS

Condition	Conditions Seen Weekly			
	NONE	1-2	3-4	5 PLUS
Nutritional Anemia	8	14	6	4
Sickle Cell Anemia	22	9	1	0
Anemia Secondary to Infection	19	8	1	3
Nutritional Disease	21	10	0	1
Debilitating Parasitic Disease ..	19	8	1	4
Cardiac and Orthopaedic Condi- tions	26	5	0	0
Nephritis	29	3	0	0

Sickle cell anemia is seen with much less frequency with two-thirds of the physicians seeing one to two cases weekly. Anemias secondary to infections occur in about the same incidence pattern as the sickle cell variety, and the same finding is valid for nutritional and debilitating parasitic conditions.

Cardiac and orthopaedic conditions amenable to surgery are not seen at all or are very rarely seen by about 85 per cent of the Delta physicians. Slightly more than a fourth of them see one to two cases weekly. Nephritis, a condition prominently mentioned in the Field Foundation report, is seen least of all conditions with virtually nine out of ten physicians seeing none as a weekly case occurrence.

It is notable that this incidence pattern for the Mississippi Delta coincides almost identically with

the pattern for the state as a whole. May I also underscore and emphasize that the pattern is coincidental with prevailing and expected national morbidity patterns.

Dr. Lotterhos and I were astonished to hear the six physicians who testified on the morning of July 11 make such sweeping, non-quantitative charges as to prevalence of disease among Negro children in the Delta while failing to present your subcommittee with documentation as to incidence, laboratory findings, comparative data as to demography, epidemiology, and morbidity, together with other essential facts universally considered necessary to demonstrate scientific credibility. The only laboratory diagnostic data presented related to Lowndes County, Alabama, and there is no rational basis for relating these data—even remotely—to the Mississippi Delta.

The theoretical discourse by the witness among the six physicians as to brain damage from nutritional deficiency was qualified by him as not yet being scientifically established, and while his speculation on adult distrust by children as a consequence of insufficient diet is interesting, we feel that your subcommittee is entitled to more substantial information than the viewpoint of a single psychiatrist, if this contention is to be seriously considered.

The Mississippi State Medical Association welcomes publication of its testimony in the printed record of the hearings, and we are deeply grateful for your holding the record open for a period of two weeks, as you graciously assured Senator Stennis, so that we might have the opportunity to supply these additional data you requested and these comments. The two additional tables are appended to this letter, and they supply the information for which you asked.

We deeply appreciate this opportunity, and our association will be ready to respond to any additional requests for information which you or any member of your subcommittee may desire.

★★★

735 Riverside Drive (39216)

SUMMER SALE

Said the TV fan watching one of the summer replacement entertainers: "This is really good. They say that he has sold a million TV sets."

"I can well imagine," replied her bored husband. "I am considering selling ours."

Radiologic Seminar LXV: Osteoid Osteoma

RAMÓN R. LUIÑA, M.D.
Meridian, Mississippi

OSTEOID OSTEOMA is a benign tumor of bone of osteogenic connective tissue origin first described by Jaffé in 1935.

The accompanying roentgenograms are those of a 17-year-old male seen at a local hospital with complaint of pain referred to the mid portion of the right thigh for approximately 28 months. On admission the patient had no constitutional symptoms, and the blood count and differential were normal. The x-ray studies were considered to be typical for osteoid osteoma, and the diagnosis was proven by surgical removal and microscopic examination.

The characteristic roentgen picture consists of a small oval or round area of radiolucency surrounded by a dense shadow of reactive sclerosis of the adjacent bone. The area of radiolucency represents the tumor per se and is described as an osteoid osteoma nidus which is composed of osteoid and trabeculae of newly formed bone.

The nidus may develop within the medullary portion of the bone at or near an articular surface or it may develop in relationship to the cortex of the bone. In instances where the lesion develops in the spongiosa there is generally seen a thin rim of reactive sclerosis. When it develops in relation to the cortex, a larger amount of reactive sclerosis is produced. This may extend for a considerable distance beyond the osteoid osteoma as illustrated in this case.

The lesion may be seen in young children, but is more often found in adolescents and young adults. Important facts to be remembered are:

—the lesion is definitely rare beyond the age of 30 years,

—in about one-half the cases the lesion is found in a tibia or a femur, although involvement

of other bones occurs such as in the foot, fingers, vertebrae, ribs and mandible,

—the major complaint is local pain, which at first is mild, but with time may increase in severity (characteristically, the bone pain is often relieved by aspirin),

—local swelling or sharp localized tenderness over the area can be demonstrated but rarely does local heat, redness or fever occur,

—the lesion usually does not exceed a centimeter in greatest dimension, although lesions measuring as much as 5 to 6 cm. have been reported as giant osteoid osteomas.

The main problem is to differentiate roentgenographically between an osteoid osteoma and intracortical bone abscess or chronic sclerosing osteomyelitis. A fact to bear in mind is that osteoid osteoma represents a benign bone neoplasm and not a response to infection.

Surgical removal of the lesion is the treatment of choice with this usually resulting in lasting relief of pain. The osteoid osteoma nidus must be completely removed along with some of the surrounding bone. If the nidus is missed on surgical intervention, pain will recur along with increasing perifocal sclerosis on x-rays of the area.

Pre-operative radiographic localization of the osteoid osteoma is of prime importance. The nidus is likely to be situated directly beneath the point of greatest convexity of the thickened cortical surface.

The ultimate prognosis of untreated lesions and the effectiveness of irradiation is not known. ★★★

1204 21st Ave. (39301)

REFERENCES

1. Louis Lichtenstein: Bone Tumors, ed. 3, St. Louis, The C. V. Mosby Company, 1965.
2. Ernest Aegerter and John A. Kirkpatrick, Jr.: Orthopedic Diseases, Philadelphia, W. B. Saunders Company, 1958.

Sponsored by the Mississippi Radiologic Society.



Figures 1 and 2 show lesion of mid shaft of the right femur in the AP and lateral projection respectively. Note the radiolucent oval shaped shadow rep-

resenting the nidus surrounded by area of sclerosis with considerable thickening of the cortex.

CORONER'S VERDICT

The winningest football coach was having another fine season. Meeting with his alumni president, they were talking about coming years.

"Why don't you insist that the university give you a lifetime contract?" asked the alumni chief.

"It's not too good an idea," responded the coach. "I knew one coach who got a lifetime contract, and after a couple of bad seasons, the university president called him in and pronounced him dead."

Acute Renal Failure

JOHN D. BOWER, M.D. and ALVIN E. BRENT, M.D.

Jackson, Mississippi

THE PURPOSE of this paper is to review the diagnosis and management of acute renal failure and to present several cases to illustrate the three types of acute renal failure seen clinically.

Acute renal failure may be defined as the sudden cessation of renal excretory and homeostatic function. It will be noted that in this definition there is no reference to the urine volume, the degree of elevation of the serum urea nitrogen (SUN) or creatinine. Also conspicuous by its absence is any reference to edema, proteinuria, blood pressure or clinical uremia.

Acute renal failure has been divided and subdivided into many classifications, but the one most universally accepted is:

1. Post-renal failure
2. Pre-renal failure
3. Parenchymal renal failure

This classification is important because it allows one to approach the patient from a diagnostic as well as a therapeutic standpoint. The first two types of acute renal failure are immediately remediable and reversible if corrected in time. It is also noteworthy that parenchymal damage may result if pre-renal and post-renal failure is undiagnosed and untreated. Post-renal failure will be discussed first because this form of acute renal failure can be remedied the quickest and is the most frequent.

The cause of post-renal failure can be summed up in one word and that is obstruction. The way to diagnose this entity is to systematically review the collecting system from the urethral meatus to the minor calyces. The most common cause of this type of renal failure is benign prostatic hypertrophy and is seen by the urologist on most occasions.

From the Department of Medicine, University Medical Center.

The first step then would be to rule out a lower urinary tract obstruction with a Foley catheter. If there is no urine output with a catheter in the bladder, then a search of the upper collecting system should be made, particularly if the patient is anuric. This can be done by unilateral retrograde catheterization and pyelography. The reason for unilateral retrograde pyelography is to prove

Acute renal failure may be defined as the sudden cessation of renal excretory and homeostatic function. The authors review the diagnosis and management of this disorder and present cases to illustrate the three types of acute renal failure seen clinically.

the patency of one normal collecting system, and then obstructive uropathy is ruled out.

The hazards of bilateral retrograde pyelography, although rare, are well known. Acute renal failure due to ureteral edema following bilateral retrograde pyelograms has been reported. If a stone or other obstructive disease is encountered, then a ureteral catheter is left in place until the uremic state is corrected. Under these circumstances then the opposite side must be retrograded because it takes bilateral renal disease to produce acute renal failure.

One of the major clues to the diagnosis of post-renal failure is anuria, and anytime this is present, obstruction must be considered. There are, however, infrequent parenchymal disorders that are capable of producing anuria. Anuria can be caused by cortical necrosis, fulminating acute glomerulonephritis, toxemia of pregnancy, bilateral renal artery thrombosis and a few other uncommon major renal catastrophes, but in gen-

eral anuria should make one consider obstruction as the cause of acute renal failure.

Many causes of obstruction might be listed, but a reference to any standard urological text will present an impressive array of etiologies for obstruction. Once obstruction has been ruled out or is felt not to be present, then a differential between parenchymal renal failure and pre-renal failure must be made.¹

Pre-renal failure has as a common denominator a decrease in the effective circulating blood volume. This can be caused by hemorrhage, dehydration, heart failure, or any disorder that decreases peripheral resistance. It should be noted that all of these have as their common mediating factor a situation that decreases renal blood flow as a result of a decreased effective blood volume. This would include all forms of peripheral circulatory failure and shock, and again any standard textbook can be referred to for the etiology and management of shock.²

The third and clinically the most significant form of acute renal failure is that classified as renal parenchymal failure. This is also referred to as acute tubular necrosis (ATN) and has in the past been called lower nephron nephrosis. The preferred nomenclature today is acute tubular necrosis, since this is the lesion seen pathologically.

Acute tubular necrosis was divided by Oliver into two types.³ He described a nephrotoxic lesion which produced necrosis of the tubular epithelium down to, but not including, the basement membrane. Many toxic factors both endogenous and exogenous can be etiologic in producing toxic tubular necrosis. These include such things as mismatched blood, burns, crush injuries, heavy metals, carbon tetrachloride, and ethyleneglycol.

OTHER TUBULAR NECROSIS

The other type of tubular necrosis described by Oliver was ischemic or tubulorrhxic in which the tubular epithelium, including the basement membrane, was disrupted. This classification does not appear important clinically, but it may explain the varying degree of functional return following acute tubular necrosis.

One of the major problems in the management of acute renal failure is in differentiating pre-renal azotemia from parenchymal renal disease. The presence or absence of a preceding episode of hypotension does not appear to be useful in differentiating these two. Several cases have been reported in which prolonged sustained hypotension did exist without the appearance of tubular ne-

crosis and contrariwise, tubular necrosis has been reported in cases in which a hypotensive episode could not be documented under close observation. The absence of a hypotensive episode does not rule out acute tubular necrosis.

LABORATORY STUDIES

Several laboratory studies have been found helpful in this differentiation. These consist of a urinary sodium, urine specific gravity, urine osmolality, urine urea to serum urea ratio, urine creatinine to serum creatinine ratio, and the mannitol test. These tests apply only in the oliguric patient (less than 400 ml/day) and are applicable only in differentiating pre-renal failure from acute tubular necrosis (ATN). The anticipated results of these tests in the two clinical states under discussion are shown in Table I.

TABLE I
TESTS TO AID IN DIFFERENTIATING ACUTE
TUBULAR NECROSIS (ATN) FROM
PRE-RENAL FAILURE

	ATN	Pre-Renal
U _{Na-mEq/L}	70 or above	10-40
Sp. Gr.	1.010	1.015
U _{osm}	285-295	>295
U _{urea} /S _{urea}	<10:1	>10:1
U _{Cr} /S _{Cr}	<10:1	>10:1
Mannitol	No response	50% urine volume increase

When differentiating these two clinical states, the mannitol test should not be done until after a baseline urine sample has been collected. Mannitol given intravenously will raise the urinary sodium concentration and tend to make the urine isosmotic in pre-renal azotemia. For this reason, a random baseline sample should be obtained for a urinary sodium, specific gravity and osmolality determination. Urea and creatinine can also be done on this same sample to be compared to the serum urea and creatinine.

The reason for the difference in the studies shown in Table I is quite apparent when one realizes that in the oliguric patient with intact tubular epithelium, the stimulus is to conserve sodium, put out a concentrated urine, and have an increased concentration of urea and creatinine in the small volume of urine obtained. On the other hand, when the oliguria is due to tubular necrosis, the epithelial cells of the tubules have been disrupted and they are incapable of performing this function.

Special precaution must be taken in doing the mannitol test. If the patient has severe azotemia, he already has a very large urea osmotic load, and the relatively small increment from the mannitol will be ineffective. This additional osmotic load will also increase the intravascular volume and may precipitate pulmonary edema if the patient is already overhydrated.

This test is done by obtaining several hourly urine outputs prior to the administration of 12½ to 25 gm. of mannitol intravenously as a single dose. The several hourly urine volumes are important because in order to interpret this test as indicating pre-renal failure, there must be an increase in urine volume over the baseline studies.

No response to the mannitol test indicates that the tubular epithelium has been disrupted, and the mannitol that is filtered is allowed to back diffuse through the damaged renal tubular cells. Again, it is important to remember that mannitol should not be given until after the baseline studies of sodium, specific gravity, osmolality, urine and creatinine have been determined on the urine.

The relative merit of each of these tests shown in Table I have been discussed by several authors.^{4, 5} No single test is infallible, but the urine sodium seems to be the most valuable, since low urinary sodium in a patient with oliguria is incompatible with acute tubular necrosis. The normal kidney can reduce the urinary sodium to zero mEq per liter when appropriately stimulated.

Several clinical situations, including chronic renal disease, with a tendency to lose sodium will render a spuriously elevated urinary sodium in patients who do not have acute tubular necrosis. The great majority of these, however, will fall between 40 and 70 mEq of sodium per liter. This has been referred to as the grey zone or the non-diagnostic range. The main usefulness of this test is in a negative sense where one can say that if the urinary sodium is low then acute tubular necrosis does not exist.

GRAVITY, OSMOLALITY TESTS

The urine specific gravity and osmolality can also be quite helpful, but these tests are somewhat less useful than the urinary sodium because the ability to concentrate urine is lost in chronic renal disease and elderly patients, whereas they can usually conserve sodium normally. To precisely interpret a urine osmolality, a serum osmolality should be done concomitantly.

The urine urea to blood urea ratio, and the

urine creatinine to the blood creatinine ratio, is also an index of the integrity of the tubular epithelium. If the tubular epithelium is disrupted as in acute tubular necrosis, the patient will be unable to concentrate urea or creatinine in the urine. When the tubular epithelium is necrotic, the urine will be nothing more than an ultrafiltrate of plasma and will contain less than a 10 to 1 concentration gradient of urea and creatinine.

Urinalysis is also of value in differentiating these clinical states. In ATN, renal epithelial cells both free and within casts are generally seen. In pre-renal azotemia and obstruction, the urinalysis is usually normal.

STATE OF HYDRATION

Regardless of the etiology or the type of acute renal failure, if the patient is grossly over or underhydrated, appropriate measures must be taken to correct this state. The irresistible urge to overhydrate the oliguric patient must be avoided since overhydration will produce dilutional hyponatremia, pulmonary edema, and death. If the patient is overhydrated as manifested by edema and neck vein distention, then fluids must be restricted to prevent pulmonary edema. This is one of the most common causes of death in acute renal failure and in most instances is physician induced.

The first entity to be ruled out is obstruction. This is the most immediately remediable and will allow a prompt return of renal function if obstruction is relieved promptly. This is done simply by proving patency of the collecting system. Once obstruction has been ruled out, or is felt not to be the problem clinically, then one must differentiate between pre-renal failure and parenchymal disease.

In the case of pre-renal failure, the therapeutic approach is to simply restore the effective circulating blood volume by whatever means necessary. This would include blood volume replacement in the case of blood loss, or fluid replacement with the appropriate intravenous solutions in the case of dehydration. It would also necessitate correction of any of the known factors predisposing to the shock state, including decreased peripheral resistance or inadequate cardiac output.

Once the diagnosis of acute tubular necrosis has been established, no effort, regardless of how vigorously applied, will induce a diuresis. The emphasis at this point then shifts to the medical management of renal shutdown. The general principles of treatment are outlined in Table II.

As noted previously, one of the most important problems is the management of water balance.

The amount of sustaining fluid can be arrived at quite simply by adding the anticipated insensible losses (usually 300-400 cc/24 hrs), measured output from all sources, and the exaggerated in-

TABLE II
GENERAL PRINCIPLES FOR THE MANAGEMENT
OF ACUTE TUBULAR NECROSIS

1. Maintain water balance (should lose ½-1 lb/day)
2. Decrease protein catabolism
a. exogenous
b. endogenous
3. Treat or prevent hyperkalemia
4. Correct acidosis
5. Treat anemia
6. Institute hemorrhage control
7. Treat congestive heart failure
8. Treat infection

sensible losses of fluid due to a febrile state. Regardless of the methodology used to calculate this volume, the best index of fluid therapy is the daily weight. A normally hydrated person with acute tubular necrosis should lose ½ to 1 pound per day during the period of oliguria. No other parameter so easily obtainable is of greater value than simply weighing the patient every day. If a weight gain is noted, then only one conclusion can be drawn. The patient is getting too much fluid.

The second general principle is the control of protein catabolism. Both endogenous and exogenous protein metabolism must be considered. Exogenous protein can be managed by low protein diet or by zero protein intake per 24 hours. Endogenous protein catabolism can be controlled by providing 100 gm. of carbohydrate per day either intravenously or by mouth during the period of time of renal shutdown for its endogenous protein sparing effect.

ORAL CARBOHYDRATES

One readily available source of oral carbohydrates is a half and half mixture of karo syrup and ginger ale. This palatable mixture provides two calories or 0.5 gm. of carbohydrates per cc. If it is chilled to a crystalline ice cream-like state it is well tolerated by patients. It contains no protein and is essentially sodium and potassium free. It is preferred to give this mixture in small frequent amounts not to exceed 400 cc. (200 gm.) per 24 hours.

The third general principle of treatment involves hyperkalemia. Next to overhydration, hyperkalemia in the past was the most common cause of death in patients with acute tubular ne-

crosis. This can be managed in several ways. In the acute phase, when hyperkalemic cardiotoxicity is impending, one can administer either calcium gluconate, sodium bicarbonate, or glucose intravenously.

Hyperkalemia arises in part as a result of the metabolic acidosis which promotes potassium shifting out of the cells. Continued potassium intake or the breakdown of cellular integrity, due either to direct cellular injury or endogenous catabolism, further aggravates this lethal state. The best way to promote a net potassium removal from the body is by the use of cation exchange resins (Kayexalate) administered either orally or as an enema. The oral route is preferred since a greater efficiency of the resin is obtained by this method.

CORRECTION OF ACIDOSIS

Acidosis can be corrected by several methods, but excessive administration of sodium bicarbonate or other alkalinizing agents must be avoided. One way to correct the metabolic acidosis is to induce a metabolic alkalosis in these patients by the use of gastric suction whereby hydrochloric acid and potassium can be removed. The stomach has been referred to under these circumstances as an excellent "peripheral kidney" for the management of acute tubular necrosis. Corrections of the acidosis by this method will also help in the management of hyperkalemia by promoting transfer of potassium back into the cells as well as providing a net removal through the stomach.

Symptomatic anemia should be corrected, but in the patient where overhydration is a problem, blood must be given as packed cells.

The management of hemorrhage and the treatment of congestive heart failure is quite apparent. Congestive heart failure, however, is usually on the basis of fluid overload and frequently fluid restriction alone is adequate. There is no contraindication whatever to giving the patient zero fluid for 24 hours in cases of severe fluid overload. Digitalis, as well as antibiotics, must be administered with caution to the patient with acute renal failure. Since the major route for excretion of digitalis and many of the antibiotics is by way of the kidney, decreased maintenance dosages of these medications must be administered to prevent digitalis and antibiotic intoxication.

After five to nine days of oliguria the patient with acute tubular necrosis will usually go into a diuretic phase. It is not unusual for this to reach six or even ten liters per 24 hours with massive electrolyte losses. At this time intensive fluid and electrolyte therapy must be administered to pre-

vent dehydration and hypovolemic shock. The seriousness of the diuretic phase cannot be overemphasized because as many as one fourth of the deaths from acute tubular necrosis occur during this period.

This can best be managed by determining 24 hour quantitative losses of fluid and electrolytes with replacement on a cc for cc and mEq for mEq basis. Again daily weights are the best index to adequate management. The diuretic phase may last for three to ten days.

One other important clinical situation that must not be overlooked is the patient that presents in the diuretic phase of acute tubular necrosis with marked dehydration, azotemia, and large urine volumes containing relatively large amounts of electrolytes. Prompt attention to fluid and electrolyte replacement is essential.

There is no place in medicine where the quality of medical care is more reflected in survival rate. The ultimate outcome of the patient is more dependent upon the factors that caused the tubular necrosis than upon the tubular necrosis itself.

The role of dialysis in the management of acute tubular necrosis will be mentioned briefly. Almost any hospital has or can readily acquire the facilities to carry out peritoneal dialysis. In addition, most all medical centers have facilities for hemodialysis. Since dialysis can maintain bilaterally nephrectomized patients almost indefinitely, no patient suffering from a potentially reversible renal disease should be denied this facility.

The following cases will demonstrate the three types of acute renal failure discussed in this paper.

CASE I: POST-RENAL FAILURE

W.P.B., a 67-year-old man, was well until eight days prior to admission when he developed right lower quadrant pain and vomiting. The patient continued to have intermittent discomfort in the right lower quadrant, and he had a generalized convulsion on the morning of admission. Past history revealed that he had a long history of urethral strictures and recurrent urinary tract infections.

At the time of admission the patient was in a coma with a blood pressure of 210/110, pulse 112, and respiration 48. He was sweating profusely. He had a laceration of the tongue and there was dried blood in his mouth and oropharynx. Auscultation of the lungs revealed scattered rhonchi.

Examination of the heart revealed a tachycardia only, and the abdomen was described as obese, with no subjective interpretation possible due to his comatose state. Bowel sounds were hypoactive. On rectal examination the prostate was minimally enlarged and a small amount of blood was noted draining from the urethral meatus on palpation of the prostate. He had no peripheral edema, and the pulses were within normal limits.

X-RAY FINDINGS

An abdominal x-ray showed a stone in the lower pole of the right kidney, and a small calculus along the course of the lower right ureter. The chest x-ray showed a patchy pneumonitis. The EKG showed sinus tachycardia and peaked T waves compatible with hyperkalemia. Laboratory data revealed a hemoglobin of 16.1 gm/100 ml, hemotocrit of 48 per cent, and a white cell count of 16,400 with a shift to the left. His BUN was 189 mg/100 ml, and the creatinine was 18.9 mg/100 ml. He had a chloride of 94 mEq/liter and a CO₂ combining power of 12 mEq/liter, potassium of 8.0 mEq/liter and a sodium of 126 mEq/liter.

Immediately after admission he was given a Kayexalate enema and taken to the operating room for retrograde pyelography. The patient was found to have a small hypoplastic left kidney and a ureteral calculus on the right. Two ureteral catheters were placed in the right kidney for drainage around the calculus. On the following day he was somewhat improved, and his sensorium was much clearer.

His urine output was approximately 4 liters over the next 12 hours, and he continued to have a good output with subjective improvement. His BUN was coming down rapidly and his potassium was 6.2 mEq/liter by the next morning. By his third hospital day his BUN was down to 69 mg/100 ml, with a creatinine of 2.9 mg/liter and a potassium of 4.5 mEq/liter.

On the ninth hospital day, he underwent a right ureterolithotomy with the removal of a 0.5 cm. calculus. The patient tolerated the operation quite well and at the time of discharge his BUN was 33 mg/100 ml, with a creatinine of 1.9 mg/100 ml.

This case represents post-renal failure due to a hypoplastic kidney on the left and a ureteral calculus on the right producing obstruction. A previous history of oliguria without clinical dehydration, plus the presence of a calculus along the course of the right ureter, prompted the retrograde pyelography which confirmed the ureteral obstruction. The patient had a prompt return of

function after ureteral catheterization and continues to do well.

CASE II: PRE-RENAL AZOTEMIA

L.T., a 45-year-old woman, had a sudden onset of right hemiparesis and aphasia five weeks prior to admission. After a lumbar puncture and skull x-rays, it was felt that she had a left middle cerebral artery thrombosis. The patient was allowed to return home for convalescence.

The family stated the patient had done well until one week prior to admission when she became markedly anorexic. For several days she had had no intake by mouth and had recently become lethargic and unresponsive.

Physical examination revealed a blood pressure of 160/105. She was noted to be markedly dehydrated. Examination of the fundi revealed marked arteriolar narrowing without hemorrhages or exudates. The heart and lungs were normal. Abdominal examination was negative. Neurological examination revealed a right hemiparesis and marked motor aphasia.

CBC at the time of admission revealed a hematocrit of 51 per cent, hemoglobin of 17.9 mg/100 ml, and a white cell count of 11,750. Electrolytes revealed a sodium of 174 mEq/liter, potassium 6.2 mEq/liter, CO_2 combining power of 20 mEq/liter, chloride of 132 mEq/liter. Her BUN was 295 mg/100 ml, with a creatinine of 5.8 mg/100 ml.

She received a total of 12 liters of IV fluid over her first two hospital days. Her urine output over this same period was approximately 7 liters. With continued fluid therapy, her BUN on the fourth hospital day was 39 mg/100 ml, and her creatinine was 2.0 mg/100 ml. Clinically there was also marked improvement, and she was taking both liquids and solids by mouth.

This case represents a classical case of pre-renal azotemia in an aphasic hemiparetic patient unable to ask for or get water. The prompt response to aggressive fluid therapy with a prompt return of renal function confirmed the diagnosis.

CASE III: ACUTE TUBULAR NECROSIS (ISCHEMIC)

O.L.G., a 32-year-old man, was in an automobile accident three days prior to his admission and had a documented hypotensive episode of at least three hours. He received at least 16 units of whole blood prior to his admission to the Medical Center. At the time of admission his blood pressure was 150/100, pulse 100, and temperature 99.

He was lethargic, cyanotic, and had rapid respirations with marked abdominal distention. He had moist rales in both lungs with dullness on the left. There was pain to palpation in the left flank with abdominal rebound tenderness. He also had multiple contusions and bruises located over the left anterior lateral chest and left flank. Chest x-ray revealed evidence of bilateral hemothorax, more marked on the left with several rib fractures. He also had a posterior dislocation of the left hip.

BLOOD CHEMISTRY

Blood work at the time of admission revealed a BUN of 89 mg/100 ml, a creatinine of 10.2 mg/100 ml, a sodium of 128 mEq/liter, a potassium of 5.3 mEq/liter, chloride of 90 mEq/liter, and a CO_2 combining power of 12 mEq/liter. His hematocrit was 26 per cent and a hemoglobin of 8.6 gm/liter. His urinary sodium was 80 mEq/100 ml.

A chest tube inserted in the left chest revealed 2,000 cc. of blood and an abdominal paracentesis was productive of 3,000 cc. of blood. After abdominal paracentesis, a large mass was palpated in the left flank which was felt to represent a retroperitoneal hematoma. Retrograde pyelograms showed extravasation of dye into the renal parenchyma without undue pressure distortion of the lower collecting system.

He remained oliguric for the first three days in the hospital, and then began increasing his urine output reaching 6,330 cc/24 hrs. by the 12th hospital day. At the time of discharge the patient had a creatinine clearance of 119 cc/minute, with a BUN of 15 mg/100 ml, and a creatinine of 1.1 mg/100 ml.

This patient represents a case of acute tubular necrosis due to hypotension as a result of intra-thoracic retroperitoneal and intra-abdominal hemorrhage. He also had direct injury to the superior pole of the left kidney which healed without sequelae. This patient followed the classical course of tubular necrosis in that he had a diuretic phase following six days of oliguria with return of renal function to within normal limits.

CASE IV: ACUTE TUBULAR NECROSIS (TOXIC)

R.C., a 64-year-old female, had "blocked kidneys" in 1941 after receiving a sulfa drug for urinary tract infection. She also had a skin rash at that time but recovered without sequelae. For the past 15 years she had been treated for hypertension. The patient had also been treated for

multiple other problems including nervousness, hiatus hernia, and inner ear trouble.

Approximately four weeks prior to admission, she had the onset of left lower abdominal pain. She was placed on sulfasuxadine and tetracycline approximately two weeks prior to admission, when a barium enema confirmed the presence of diverticula.

After being on this medication for eight days, she developed bullous lesions over the legs, linea alba and palms. She was treated with steroids and an antihistamine for four days with improvement in the cutaneous lesions. The time of onset of the anuria was not clear, but it was felt to be approximately three days prior to admission.

A catheter was inserted one day prior to admission, and there were only 20 cc. of urine in the bladder. The catheter was removed and 24 hours later, after the patient had not voided, the catheter was reinserted and there were only 5 cc. of urine obtained.

Physical examination at the time of admission revealed a blood pressure of 70/50, pulse 120, respiration 32, and temperature 97. Eye grounds revealed Grade II arteriosclerotic changes without hemorrhages, exudates or papilledema. There were distant heart sounds but no murmurs or gallop. There were fine moist rales in both lung bases. The abdomen was diffusely tender, particularly in the upper right and the left lower quadrant with moderate rebound and guarding. There was no peripheral edema.

Chest x-ray revealed cardiomegaly with bilateral increased markings compatible with congestive heart failure. The EKG showed left bundle branch block and a first degree AV block probably secondary to digitalis. Her hematocrit was 40 per cent with a white cell count of 17,000 and a shift to the left. It was felt that she had a diffuse allergic reaction to Sulfasuxadine. The patient remained totally anuric for the first five days during

which period of time she received Aramine and 10 per cent dextrose in water intravenously.

Her BUN at the time of admission was 125 mg/100 ml, with a creatinine of 6.5 mg/100 ml. Her serum sodium was 127 mEq/liter, potassium 4.5 mEq/liter, chloride 91 mEq/liter and CO₂ combining power of 15 mEq/liter. Her urinary sodium was 124 mEq/liter. On the third hospital day with a rapidly rising BUN and creatinine, peritoneal dialysis was begun. This was continued over the next three days, being discontinued on the sixth hospital day. The BUN was brought down to 102 mg/100 ml. Peritoneal dialysis had to be discontinued because of her diverticulitis, ileus, and peritonitis.

On the fifth hospital day she passed 280 cc. of urine which gradually increased reaching a peak of 3,685 cc. by the 17th hospital day. During the diuretic phase, the patient was losing 260 to 300 mEq of sodium in the urine per 24 hours. By the 25th hospital day the BUN was 29 mg/100 ml, and her creatinine was 1.4 mg/100 ml, with normal electrolytes.

This case represents a case of acute tubular necrosis as part of a severe toxic vasculitis most likely attributed to sulfa. Retrograde pyelography was considered, but her prolonged period of shock and precarious cardiac status precluded this procedure. Peritoneal dialysis was done to prevent the complications of uremia and also to remove the sulfa. ★★★

2500 North State St. (39216)

REFERENCES

1. Allen, A. C.: *The Kidney: Medical and Surgical Diseases*, New York, Grune and Stratton, 1951.
2. Harrison, T. R.: *Principles of Internal Medicine*, ed. 5, New York, McGraw-Hill Book Company, 1966, p. 138.
3. Oliver, J.; MacDowell, M., and Tracy, A.: *The Pathogenesis of Acute Injury: Renal Ischemia, Nephrotoxic Damage and the Ischemic Episode*, J. Clin. Invest. 30:1307, 1951.
4. Strauss, M. B., and Welt, L. G.: *Diseases of the Kidney*, Boston, Little Brown and Company, 1963.
5. Black, D. A. K.: *Renal Disease*, Philadelphia; F. A. Davis and Company, 1962.

OUTER LIMITS

Three of the jolly good fellows set stopped in a bar for a few rounds one evening. After the sixth, one of them slipped off the stool and slid quietly to the floor.

"Now, that's one good thing you gotta say for old Joe," observed one of the remaining rounders. "He sure knows when to stop."

The Mississippi Medical College: Venture in Science, Casualty of Flexner

BEN E. KITCHENS, M.D.

St. Louis, Missouri

ON MARCH 30, 1906, at a well-attended meeting of the physicians of Meridian held in the parlors of the Southern Hotel, the question of establishing a medical college in Meridian came up for consideration. Every physician present expressed himself as being heartily in favor of such an institution and it was decided to take active steps at a meeting to be held soon for the establishment of such a college.¹

Previous attempts to organize a medical college in Meridian had met with failure. On April 27, 1882, the State of Mississippi issued a grant of charter to "Kirk's Clinical Institute of Medicine and Surgery," with corporate domicile at Meridian, Miss. The name of the corporation was changed to that of "The Meridian Medical College" on Aug. 4, 1884. There are no records to indicate what disposition was made of this grant of charter.²

On Friday, April 6, 1906, the physicians of the city gathered again in the parlors of the Southern Hotel to discuss the advisability of establishing a medical college in Meridian. The question was discussed at length, and while a few expressed themselves as opposed to the movement, a majority of those present were in favor of establishing the school, believing that it would be a great success and of large benefit to the city of Meridian.³

Later that month the establishment of the college became a certainty. On Friday, April 27, 1906, the physicians interested in the movement met over G. C. Kendall's Drug Store in Meridian, and the necessary committees on faculty, buildings and trustees were appointed. At that time several sites for the college were under consideration. Some plans were submitted, and it was decided that the interior of whatever house selected would be remodeled and modernized.⁴

On June 14, 1906, the State of Mississippi issued a grant of charter to "The Mississippi Medical College" with corporate domicile at or near the city of Meridian, Miss. The incorporators were N. L. Clarke, M. J. Lowry, W. W. Hamilton, J. E. Seale, F. L. Walton, W. W. Reynolds, and T. A. Barber.² The charter was accepted June 16, 1906.⁵

On Tuesday, June 19, 1906, an announcement was made in the *Meridian Evening Star* that the

The Mississippi Medical College opened its doors in Meridian on Oct. 1, 1906, and closed May 11, 1912. The history of the institution is discussed from its conception at a meeting of Meridian physicians to its demise as a result of the Flexner Report and adverse legislation.

charter had just been approved and that the officers, executive committee, and board of trustees had been elected and the faculty and lecturers named by the stockholders. It was announced that the Mississippi Medical College would open the session of 1906-07, October 1, in the new college building then in course of construction on 5th Street between 24th and 25th Avenues. O. W. Bethea, the secretary of the college, was preparing to flood the country with literature, which was then in the hands of the printers.⁶

The exercises incident to the opening of the Mississippi Medical College were conducted on the evening of Oct. 1, 1906, in the auditorium of the courthouse in Meridian. Prof. W. W. Hamilton, president of the faculty, presided over the meeting. He endeavored to establish the fact that the college was not a local organization, but that

MEDICAL COLLEGE / Kitchens

as the only place of training for doctors in the state, it belonged to the entire people of Mississippi, and as such it should be supported.⁷

On Oct. 2, 1906, the first lectures were given. Prof. W. J. Anderson occupied the first hour in a lecture on physiology. Prof. W. H. Rowan followed in an introduction of the subject of physical diagnosis after which Prof. W. J. Lowery concluded the morning classroom work with a lecture on gynecology. From the college building several members of the faculty accompanied the surgery class to the Matty Hersee Hospital, where two major operations were performed. When the afternoon session was convened, it was announced that there would be but one more lecture for the day, but that in the future all hours would be taken up. Prof. O. W. Bethea spoke from 1 until 2 o'clock on pharmacology and then the school stood dismissed until 8 o'clock the following morning.

Sixty-three students matriculated the first day. During the following few weeks of the first session, the number of students increased to 103, with seven states being represented.

ADMISSIONS CRITERIA

The Mississippi Medical College adopted the same admission requirements as those required by the Southern Medical Association. Every student which applied to the freshman class had to possess a certificate of qualifications from two known, reputable physicians certifying as to his moral character and general fitness for the study of medicine. In addition, he had to possess a diploma from some scientific or literary institution of learning, or a certificate from some recognized high school, superintendent of education or board of public education or a first grade certificate or teacher's license. If a student possessed none of these, he could go before a superintendent of public instruction and upon examination be supplied with a certificate stating that his scholastic attainments were equal to those requisite for a first-class teacher's certificate.⁸ It is doubtful if any members of the Caucasian race were turned away for inability to meet the admission requirements.

Women were admitted on the same basis as men. The first woman graduate, Margaret Roe Caraway of Atlanta, Ga., was graduated in 1910 as vice president of her class and married its honor student. At that time there were only two women doctors practicing in all of Mississippi, one of them being Dr. Sarah Castle of Meridian, who was on the college staff and proudly assisted the prog-

ress of her only female student.⁹ On the night of Dr. Caraway's graduation, April 30, 1910, Ex-Senator C. C. Dunn, in presenting the diplomas said that, "The Mississippi Medical College has the distinction of being the first Southern medical college to turn out a woman graduate."

PERMISSIVE CURRICULUM

The four years' graded course was adopted as the college curriculum, but in order to provide for the convenience of students not in the graduating class who desired to practice during the vacations or between sessions, the entire student body was allowed to attend all of the lectures and quizzes and were allowed to be present at all the college clinics.⁸

During the freshman year, students studied anatomy, physiology, chemistry, physics, materia medica, and histology, with laboratory requirements in chemistry, histology, anatomy, and physiology.

During the sophomore year, anatomy, physiology, chemistry, materia medica and therapeutics, pharmacology, pathology, histology, bacteriology, medical jurisprudence and hygiene were studied, with chemical, microscopical, pathological, bacteriological, physiological, and anatomical laboratories. At the close of the second year, students were allowed to pass off anatomy, physiology, chemistry, materia medica, bacteriology, histology, and dissecting.⁸

The above laboratory requirements are those listed in the 1908-09 annual college announcement. Dr. S. B. McIlwain[†] of Pascagoula, Miss., who graduated from the Mississippi Medical College in 1910 and is the only living graduate who is still actively practicing medicine, paints a somewhat different picture.

McILWAIN RECOLLECTIONS

He recalled, "Classes began each morning at 8 a.m. and lasted until 4:30 p.m. With the exception of the anatomical laboratory, teaching was entirely didactic, with all lectures open to all students. All of the teachers were practicing physicians in Meridian, and in general, were good lecturers. Oral quizzes were given once a week in all subjects. The more important quizzes were always written and of the discussion type. Studying until 11 and 12 o'clock during all four years was the standard practice of the more industrious.

[†] Since receipt of this paper for publication, Dr. McIlwain died on June 6, 1967.

"Each student dissected one cadaver a year for the first two years, and most students gained a thorough knowledge of anatomy. In addition, after fulfilling the anatomy requirements of the first two years, during the junior year some of the students would be dissecting 'captains,' and in leading the freshman and sophomore dissecting teams, would gain a much more complete knowledge of anatomy. There was no other laboratory work at all. The college owned one microscope, a few prepared slides, and a few pipettes, but they were rarely, if ever, used. No physiology or chemistry laboratory experiments were performed by either students or faculty. Autopsies were not performed by, or even observed by, students."

Third year subjects included therapeutics, theory and practice of medicine, internal medicine, didactic surgery, clinical, operative and traumatic surgery and surgical laboratory, minor surgery and surgical dressings, obstetrics, gynecology, genitourinary surgery and venereal diseases, eye, ear, nose and throat, physiological chemistry and toxicology, pediatrics, physical diagnosis, and the other primary branches which had not been passed off. At the close of the junior year, students could take final examinations in physiological chemistry, toxicology, physical diagnosis, therapeutics and minor surgery, and surgical dressings.⁸

FOURTH YEAR

During the senior year, attendance in lectures in primary branches was optional with students who had taken their final examination on those branches and received certificates showing a general average of 75 per cent or more.

Because of the paucity of clinical material, the clinical instruction which the students received

during their third and fourth years was obtained almost entirely from lectures and reading the textbooks. The students rarely examined a patient or took a history. Very infrequently, a few patients were brought to the college. The students owned no stethoscopes, auscultation was performed by placing their ear directly on the chest of the patient. Some of the faculty members had staff privileges at Matty Hersee, a small hospital about a mile from the college and occasionally (probably less than once a week) the students would observe a surgical operation there, though never scrubbing or assisting.¹⁰ Some of the students performed operations on cadavers when they could obtain a fresh specimen.¹¹

ROOM AND BOARD: \$3.50 A WEEK

There was no college dormitory, but the college made arrangements with a number of private families who lived near the college to take medical students during the session at moderate prices. In the radius of a few blocks there were several boarding houses. Good board and lodging could be obtained at \$3.50-5.00 per week.⁸

Other college expenses were comparatively cheap. Matriculation fees were \$5. Professors' tickets, which were required for admission to lectures, were \$70. The dissecting fee was \$10 and the graduating fee was \$25.⁸

With the organization of the Mississippi Medical College in the spring of 1906, the sessions were conducted in a large hall in a building on 5th Street, between 24th and 25th Avenues (Figure 1). The session of 1906-07 opened with a matriculation roll far in excess of the expectations of the promoters of the institution, and it was soon apparent that larger quarters were needed. During the summer vacation following the first graduation, a second large hall adjoining the one being used was secured and modeled into a lecture hall with a seating capacity of 250 students, a large dissecting room, and other needed facilities.⁸

The second session opened on Tuesday, Oct. 1, 1907, with an enrollment on the first day of about 78 students.¹² The new additions which had been made during the summer of 1907 were apparently not satisfactory, for when the Board of Trustees of the Mississippi Medical College held its annual meeting in the parlors of the Southern Hotel on Thursday, April 30, 1908, plans were outlined for the erection of a new and larger building.¹³

In a short address by Dr. Hamilton at the graduating exercises on May 1, 1908, he stated that he hoped that by the first of the next session



The Mississippi Medical College at 2402-5th St., Meridian. These two adjoining buildings which were used until the Avery Mansion was purchased are still standing in downtown Meridian.

MEDICAL COLLEGE / Kitchens

(1908-09) the college would occupy a building of its own and implored the assistance of the people of Meridian in making this possible.¹⁴

The businessmen and residents of the Queen City responded and soon a large lot and two buildings were purchased. The lot was a full one half block in area and was located on 25th Avenue. It adjoined the business section of Meridian on the south and east and the up-town residence district on the north and west. In the center of the lot stood a large brick three-storied residence of antebellum architectural design, known as the "Avery Mansion" (it had been named for Miss Eula Avery, a former beauty of Meridian). The building was remodeled, and a large amphitheater, capable of accommodating 300 students was constructed on the second floor. Laboratories, offices, and other necessary facilities for operation during the 1908-09 session were constructed also.

AVERY MANSION FACILITY

In addition to the "Avery Mansion" (Figure 2), there was another smaller building on the lot which was also purchased. This two-story brick

building had previously been used as a store and was converted into clinic rooms downstairs and dissecting rooms upstairs.⁸

During the 1908-09 session, over one hundred students attended the school from all parts of Mississippi and other states,¹⁵ and the large amphitheater which had been constructed on the second floor of the new college building was adequate accommodation for them. In this large chamber, all of the lectures were given, and were attended by students in all four years of study.

FLEXNER VISIT

On Jan. 12, 1909, the Mississippi Medical College was visited and inspected by representatives of the Carnegie Foundation for the Advancement of Teaching. The Council on Medical Education of the American Medical Association had sought the help of this foundation, believing that a report from such an independent body would give the reform movement in medical education added impetus. In the "Flexner Report," published in 1910, in which the official results of the Carnegie Study were released, this was written concerning the Mississippi Medical College:

"Of the two (Mississippi) schools, that at Me-



The Avery Mansion, purchased in 1910 by the Mississippi Medical College, was located at 609-25th

Ave., at the present site of the building housing the Standard Drug Co.



The Matty Hersee Hospital was organized in 1892 and erected in 1903. It was founded through the ef-

forts of Mrs. Matty Hersee Wright and supported by the city and state.

ridian is without merit. At a time when the state has already more doctors than it needs, the starting of a didactic school, conducted by the local practitioners of a small town, is absolutely unjustifiable. The state laws ought to be promptly amended so as to make such ventures impossible.

"Of clinical facilities there are practically none. Some of the faculty have places on the staff of a small hospital (Matty Hersee—see Figure 3) over a mile distant. There is no dispensary."

Neither the Council of Medical Education or the Carnegie Foundation had any legal powers and the closure and merger of the inferior schools, which were widespread over the United States in 1910, was largely due to the staunch support of the licensing boards of the individual states.

The Council on Medical Education had early realized the importance which the licensing boards would play and had repeatedly made appeals for their support:

COUNCIL REPORT

"If the state boards . . . will unite to secure these requirements and notify the schools that unless they come up to this standard by a date to be agreed on, that they will not be recognized, we shall take the greatest step forward that has ever been made in medical education in this country

. . . and no school can continue to exist in defiance of the rulings of a considerable number of state boards.¹⁶

The Mississippi State Medical Association, the State Legislature and the Mississippi State Public Health Service responded to the call for reform in Mississippi. The Committee on Public Policy and Legislation of the State Board composed of Dr. W. S. Leathers, Dr. H. L. Sutherland, Dr. E. F. Howard, and Dr. Daniel J. Williams and the Committee on Education composed of Dr. D. W. Jones, Dr. J. W. Young, and Dr. J. W. Gray, held a joint session preceding the meeting of the 1912 Mississippi Legislature, and recommended for favorable consideration by that body a bill entitled the Medical Practice Act. The members of these committees were persistent and aggressive in their efforts to obtain passage. The act was passed without any change, with only a small minority vote against the bill.¹⁷

The significant portion of this amendment to Section 3682 of the Mississippi Code of 1906, which was approved Feb. 27, 1912, read as follows:

Section I. Provided that no applicant shall be granted a license unless said applicant shall hold a diploma from a reputable medical college that requires a four years' course

of at least 32 weeks for each session.

Section II. That this Act take effect and be in force from and after its passage.

Then on April 8, 1912, Dr. I. W. Cooper introduced a resolution at the meeting of the Mississippi State Board of Health, "That on and after July 1, 1912, the State Board of Health will recognize as reputable medical colleges only those schools classified and recognized as Class A and B by the Council on Medical Education of the American Medical Association." The resolution was adopted and passed unanimously.¹⁸

This was the fatal blow to the Mississippi Medical College, which had never been given a rating greater than Class C by the Council on Medical Education. The college could continue to produce graduates if it wished, but they could not be licensed in Mississippi, as most of them previously had been.

At the graduation exercises held Saturday evening, May 11, 1912, at the courthouse in Meridian, it was announced that the college would not be reopened due to adverse legislation passed by the last legislature.¹⁹

At its meeting on Feb. 26, 1913, the stockholders of the Mississippi Medical College decided to sell its property and make final liquidation of its assets. A committee consisting of E. A. Morrison, H. F. Broach, Jr., and T. J. Houston was appointed for this purpose. They subsequently sold the property to the Y.M.C.A. and final liq-

uidation of the college corporation occurred in the latter part of 1913.²⁰ ★★★

Barnes Hospital (63110)

REFERENCES

1. The Sunday Morning Star, Meridian, Miss., Sunday, April 1, 1906.
2. Ladner, Heber: Personal Communication to Mrs. Kathleen Alford, July 16, 1959.
3. The Meridian Evening Star, Meridian, Miss., Saturday, April 7, 1906.
4. The Sunday Morning Star, Meridian, Miss., Sunday, April 29, 1906.
5. The Weekly Star, Meridian, Miss., Thursday, April 4, 1907.
6. The Meridian Evening Star, Tuesday, June 19, 1906.
7. The Meridian Evening Star, Meridian, Miss., Tuesday, Oct. 2, 1906.
8. The Mississippi Medical College Annual Announcement, 1908-09.
9. Collier, Mrs. Bryan W.: Representative Women of the South.
10. McIlwain, Dr. S. B., Personal Communication, 1966.
11. Copeland, Dr. E. A., Personal Communication, 1966.
12. The Meridian Evening Star, Meridian, Miss., Tuesday, Oct. 1, 1907.
13. The Meridian Evening Star, Meridian, Miss., Thursday, April 30, 1908.
14. The Meridian Evening Star, Meridian, Miss., Friday, May 1, 1908.
15. The Meridian Evening Star, Meridian, Miss., Saturday, May 1, 1909.
16. Third Annual Congress on Medical Education, J.A.M.A. 48:1701 (May 18) 1907.
17. Transactions of the Mississippi State Medical Association, p. 13-14, 1912.
18. Underwood, Felix J.: A Brief History of Public Health and Medical Licensure, State of Mississippi, 1799-1930.
19. The Meridian Dispatch, Meridian, Miss., Sunday, May 12, 1912.
20. Baucum, Z. V.: Medical Education in Mississippi, J. Miss. M. A., 2:61-64 (Feb.) 1961.

DEAR DEPARTED

The physician hired a British girl as his secretary and soon afterward left for a vacation in England. A fellow practitioner called the office and asked to speak with the absent doctor.

"Oh, I'm sorry, sir," said the new secretary, "but Dr. Jones has departed for the United Kingdom."

After a pause, the caller said: "That's terribly tragic. Is it too late to send flowers?"



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 26-29, 1967, Houston, Texas; Annual Convention, June 16-20, 1968, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

American Academy of General Practice, Sept. 18-21, 1967, Dallas, Texas. Mr. Mac F. Cahal, Executive Director, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

American College of Surgeons, Annual Congress, Oct. 2-6, 1967, Chicago, Ill. John P. North, Director, 55 E. Erie St., Chicago, Ill. 60611.

Southern Medical Association, Nov. 13-16, 1967, Miami Beach, Fla. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

American College of Obstetrics and Gynecology, District VII, Oct. 19-21, 1967, Jackson, Miss. William S. Cook, Chairman, 500-C E. Woodrow Wilson Dr., Jackson 39216.

STATE AND LOCAL

Mississippi State Medical Association, 100th Annual Session, May 13-16, 1968, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Mississippi Academy of General Practice, Annual Meeting, Oct. 17-19, 1967, Jackson. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September, and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box L, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.



The President Speaking

'Utilization Review'

TEMPLE AINSWORTH, M.D.

Jackson, Mississippi

UTILIZATION REVIEW is a new household word in medicine. Properly conceived and implemented in a hospital, it can do far more *for* the physician than it can *to* him. Yet, some physicians express apprehension about utilization review, most probably because they have not taken the time to discover for themselves exactly what the concept embodies or how it is meant to work.

Medicare requires utilization review as a condition precedent for hospital approval, and more recently, the Joint Commission on Accreditation of Hospitals has added it as a full accreditation requirement. There is no debating the matter: Utilization review is a permanent household word in the practice of medicine.

As conceived and implemented, the utilization review system contemplates a committee of the professional staff. Under Medicare, reviews may be made on a sample or other selection basis, and its primary purpose, as with that of tissue and audit committee functions, is educational. It is not a matter of telling any physician how long his patient may be permitted to remain in the hospital, but it does have as its primary objective the most enlightened use of hospital facilities consistent with individual professional judgment and good medical practice. This alone is beneficial to patients and physicians.

But there are other benefits. It can be the best friend a physician has when a patient all but refuses to be discharged. It can serve the staff well where a problem member is less than mindful of his discharge practices, despite exhortations from chiefs of services and other staff officers. What physicians must and can do is to assume leadership and responsibility in making utilization review work for better medical care. That's why they are active staff members, and they now have a means to further this goal. ★★★



Medicare Cost Question: The Answer Is More

I

MEDICARE'S FIRST BIRTHDAY was observed last July 1, and now that some of the figures are in, nobody can deny that the Congress created a financial behemoth. Utilization of Part 1-B was brisk, with a doctor's bill-and-a-half, 25 million of them, for each of the 17 million participants. The 48 carriers shelled out \$640 million, but the first year was only the beginning.

Another anniversary is hard at hand, because the law, as enacted in 1965, requires that the Secretary of Health, Education, and Welfare appear before Congress within two years and deliver up a stewardship accounting of the massive program. Not the least among the requirements upon the Secretary is one of his reporting whether the \$3 per month charge for Part 1-B benefits, matched by an equal amount from federal funds, is sufficient for the job. At the moment, his answer must be in the negative.

It is fair to say that the first years measure of Medicare is a partial picture, one which cannot be considered complete. The program was slow getting off the ground; it has been hampered by mountains of paperwork; and since there is no really reliable way to measure its final scope and extent, as, indeed, the Congress now debates adding more people to the eligible list at this moment, carriers cannot tool up to ultimates in administrative efficiency. Of all the figures released, the most conspicuously absent are cost-of-administra-

tion totals. It is probably more truth than humor that not even the government knows what they are at the moment, but the taxpayers will be the first to learn.

II

About 17 million of the nation's 18.3 million citizens over age 65 possess Part 1-B coverage. A substantial majority purchased it or made for themselves the affirmative decision to secure its benefits. A minority, those receiving benefits under Title I of the Social Security Act, had it purchased for them by a state. Such "buy-in" was made with Title I vendor medical funds or with Title XIX money.

Off hand, it would seem that a payout of \$640 million against an income of more than \$1.2 billion leaves the government with a tidy profit. Under Part 1-B, it doesn't work out that way.

First off, the federal government had to put up half of the \$1.2 billion to give the Social Security Administration \$72 for each beneficiary. Then, to provide Part 1-B coverage for Title I Old Age Assistance recipients, there were at least 50 per cent federal matching funds for the first \$3. After working down the real income for Part 1-B during its first year, the heavy costs of administration must also be added to medical service benefits paid out.

It is additionally important to remember that the program is just beginning to gain momentum.

Claims are now running about 700,000 per week; that's a rate of more than 36 million a year, as compared to 25 million during the first year. Even if medical care costs were to remain static—which they will not—the overall program cost in benefits paid out would have to rise almost 50 per cent during the second year.

So it is not too much in the way of speculation to say that the Secretary is going to have to ask the Congress for half again as much Part 1-B money as he had for the first year, as true costs increase at least 50 per cent. The price of goodies has got to go up.

III

Problems in Part 1-B administration are of concern to physicians as well as the carriers themselves and the government. Smooth, minimum-cost claims processing means quicker checks in the mail. While most carriers are now doing a credible job—at least on assigned claims—it has not always been thus.

Of the 48 carriers, 33 are Blue Shield plans and 15 are commercial insurance companies. The Blue plans have openly reported their operations for the first year of Medicare, while the 15 insurance companies have said little.

The Blue plans frankly say that tight labor markets, shortage of qualified electronic data processing personnel, the restrictive regulations issued by the Social Security Administration, and the necessity to query SSA headquarters at Baltimore on each claim led to a large inventory of unpaid medical bills. In fact, what happened with Part 1-B in the second half of 1966 has been happening this year on a smaller scale with the original Medicare, the Dependents' Medical Care Program for the uniformed services and their retirees.

California Blue Shield, the prepayment arm of the California Medical Association, processes 95,000 claims a day of which 14,000 are Part 1-B Medicare. At one point, says Plan President Thomas C. Paton, they were months behind payment schedules. Reports from other Blue Shield headquarters give a vivid picture of the challenge and response.

—*New York City*: A first year Part 1-B workload of 1.3 million claims and a \$41 million payout. Staff increased from 640 to 1,325 and offices increased by 22,000 square feet. Another 17,000 square feet are needed.

—*Pennsylvania*: Just under 900,000 claims in the first year, with a constant backlog of 42,000.

Current receipts are 5,500 claims per day, and billpaying is on an almost-current basis.

—*Florida*: Claims-per-month are up from 50,000 in January to 150,000 in June. A new computer system reduced processing time per claim from seven to two and a half weeks. Annual disbursement is \$7 million.

—*Utah*: The classic story of "clean" claims from physicians and hard-to-process claims from beneficiaries. First year score is 58,500 claims and \$1.7 million.

—*Michigan*: A super IBM installation of 102 key punch machines and two big computers has reduced processing time from 30 to 18 days per claim. Present daily workload is 6,250 Part 1-B claims.

—*Chicago*: Problems almost solved with a separate government contracts division with 360 people in a separate office building. Annual rate is hitting 400,000 claims at about \$14 million.

—*Wisconsin*: The state medical society is the Part 1-B administrator. By increasing claims personnel from 50 to 105 full time employees and reprogramming computer operations, payments are near-current.

Although figures have not been released to the state medical association from the Mississippi Part 1-B carrier, the Travelers Insurance Co., it is estimated that about 60,000 claims to the tune of



Copyright 1967, Mississippi State Medical Association

"Do you have one that says I tried to tell you, but you wouldn't listen?"

about \$3 million constitute its first year of operation.

IV

When Public Law 89-97 was enacted, a tax schedule was adopted for the next 15 years. The bite was set to go to 11 per cent on a wage base of \$6,600 by 1981. Obviously, that isn't enough for the program's insatiable appetite for money.

The present outlook is for the 1st Session of the 90th Congress to make a real try for a \$7,800 wage base with combined employee-employer taxes of \$716 in 1968 with a three-step increase to \$812 by 1970. Cash benefits, due for the election year increase, will go up about 13 per cent, adding to the financial burden of the working taxpayers.

By 1970 when Title XIX is a must for all states, Parts 1-A and 1-B will become the lesser part of the Social Security medical care program. Whatever is to be said about Medicare, its cost performance has written the Secretary's report to the Congress. The answer is more.—R.B.K.

Women As Equals? You Bet!

All too often, a discussion of "equal rights" for women in employment ends up with some wag suggesting female stevedores or having industry take all the signs off restroom doors. There's a little more to it than that, and even the Civil Rights Act of 1964 brings up the subject of the rights of working women.

But the very fact that there are more and more women employees in jobs of importance is exerting an impact on the insurance industry, especially as regards health and accident coverage. A growing number of carriers are offering realistic disability income protection for women, with the typical policy calling for benefits ranging from \$400 to \$800 monthly.

Today, one out of every three working Americans is a woman, and one out of six employed women hold executive-type jobs. The U. S. Department of Labor says that 26 million women are employed in the nation and that 4.5 million are "professional and technical workers, managers, officials, and proprietors." Their annual earnings are estimated at about \$81 billion, constituting a fourth of the wages paid in the United States.

That the "weaker" sex lives longer, that they may be less susceptible to certain disease entities, and that they are a factor of growing importance

in the labor force are bound to have brought about economic changes of heart. The health and accident insurance aspect is obviously a forerunner of much more substantial change.—R.B.K.

Professional Courtesy and Changing Times

Since the founding of the American Medical Association in 1847, the custom of professional courtesy has been high among the traditions of fraternalism in the profession of medicine. It has helped to characterize the art shared among physicians and of their mutual concern to apply their learning for the benefit of one another as well as for their patients.

But as the science of medicine has been thrust forward, so have its socioeconomics, and the Judicial Council of the AMA has recently endorsed "the principle of professional courtesy as a noble tradition that is adaptable to the changing scene of medical practice." This timely updating of medical tradition emphasizes that professional courtesy is not a rule of conduct that is to be enforced under threat of penalty of any kind. Rather, it is the individual responsibility of the physician to determine for himself and within his own conscience to whom and the extent to which he shall allow a discount from his usual customary fees for professional services he renders and to whom he shall render such services without charge as professional courtesy.

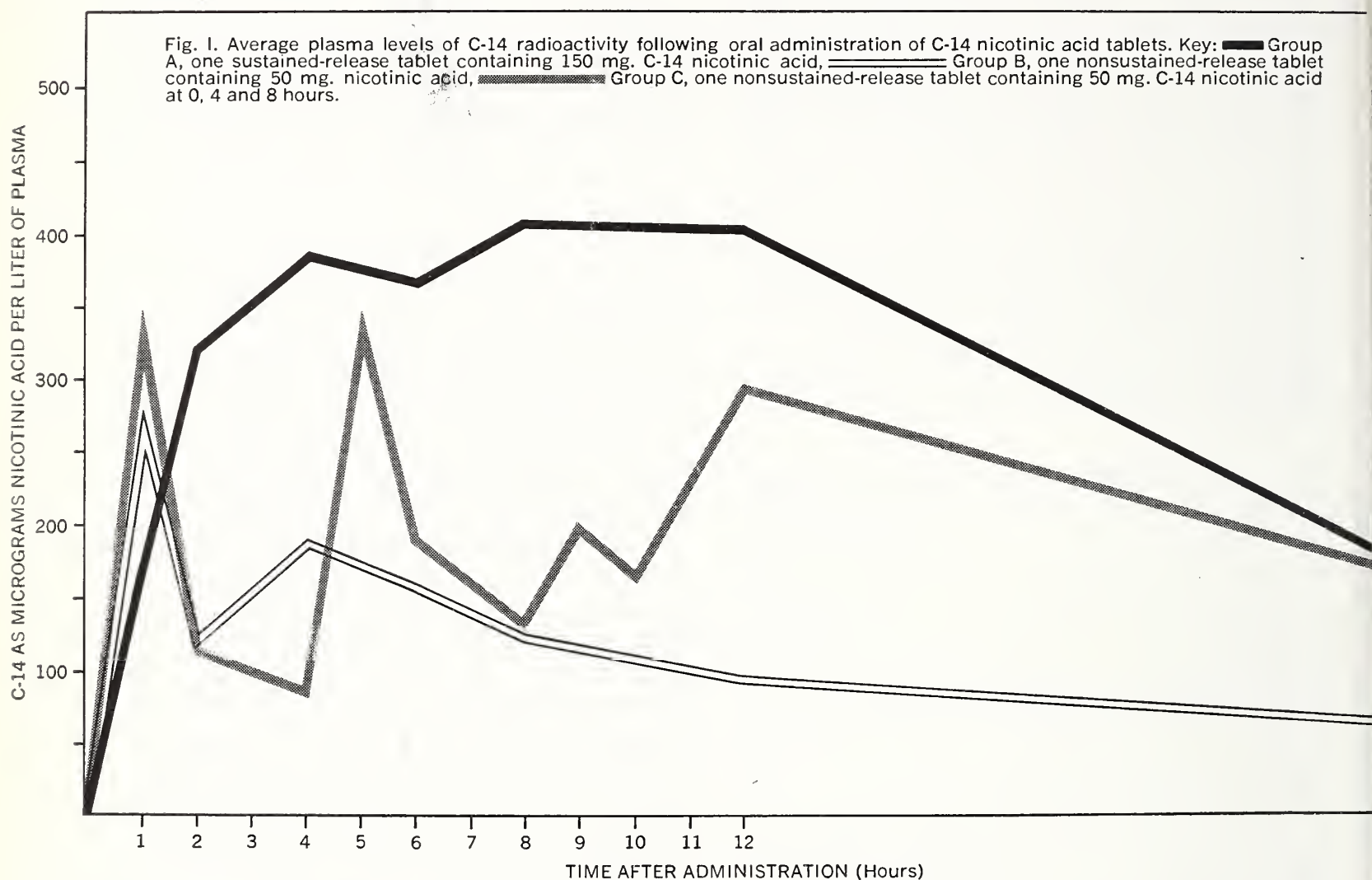
Making the updating more than mere platitudes, the Judicial Council has offered four guides to suggest ways in which physicians may make such decisions.

—Where professional courtesy is offered by a physician but the recipient of services insists upon payment, the physician need not be embarrassed to accept a fee for his services.

—Professional courtesy is a tradition that applies solely to the relationship that exists among physicians. If a physician or his dependents have insurance providing benefits for medical or surgical care, a physician who renders such service may accept the insurance benefits without violating the traditional ethical practice of physicians caring for the medical needs of colleagues and their dependents without charge.

—In the situation where a physician is called upon to render services to other physicians or their immediate families with such frequency as to involve a significant proportion of his professional time, or in cases of long-term extended

Sustained circulatory, respiratory and cerebral stimulation for the



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

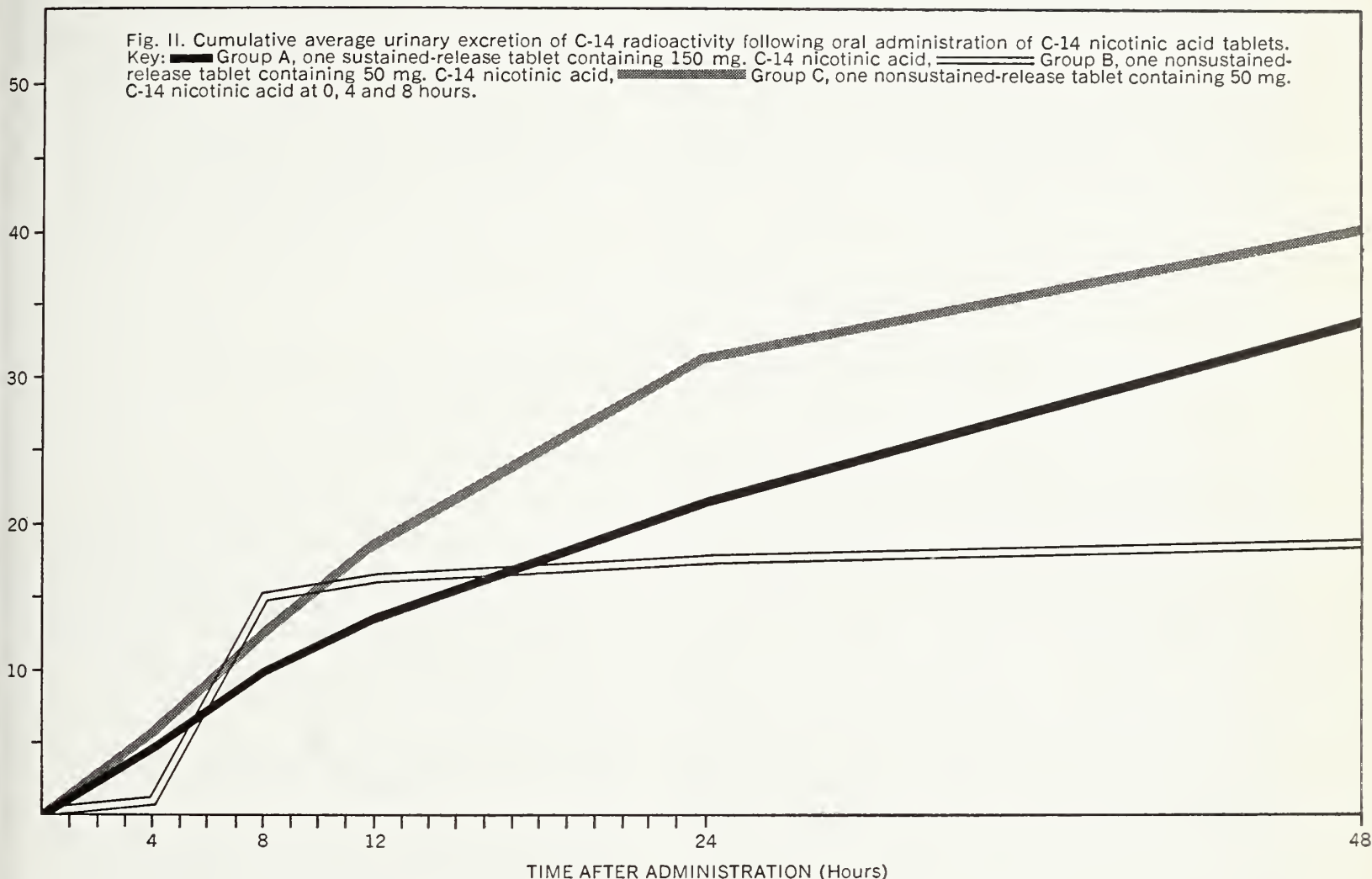
mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also cerebrovascular circulation is complemented by pentylentetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ged and debilitated

Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



ess confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylentetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.



"First with the Retro-Steroids"

PHILIPS ROXANE LABORATORIES

Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylentetrazol 300 mg.
Tempotrol[®] Time Controlled Tablet

treatment, fees may be charged on an adjusted basis so as not to impose an unreasonable burden upon the physician rendering services.

—Professional courtesy should always be extended without qualification to the physician in financial hardship, and members of his immediate family who are dependent upon him.

The Judicial Council's guides are suggestions, but they are also pronouncements with the authority of this high body's supreme position in the interpretation of medical ethics. The guides will be useful and helpful to physicians as they fulfill their high responsibilities in the changing socioeconomic climate.—R.B.K.

Obstetrics a la Bankers' Hours

The middle-of-the-night birth myth is exactly that, so says a research team from the New York City Department of Health. Intrigued by the old saw that babies are born in the wee small hours, the team made a study of 4,000 natural births over a six months period. Results: Childbirth is more likely than not to be a working day experience.

The researchers discovered that the most frequent three hour period of the day for births is 9 o'clock in the morning until noon, when 15 per cent of those studied occurred. The least frequent period of three hours was on the opposite side of the day, 9 o'clock in the evening until midnight, when about 10 per cent of the babies came into the world.

From among more than 1,360 first borns, the greatest number, 74, arrived between noon and 1 o'clock in the afternoon, and the smallest number of first borns, 35, were delivered between 2 and 3 o'clock in the morning. While the distribution of first borns throughout the day was more even than others, the three hour period before noon was still the favorite arrival hour.

The researchers logically excluded induced labor and Cesarean sections, but they were interested to observe that most induced labors delivered between noon and 4 o'clock in the afternoon.

Please keep these comforting statistics in mind the next time you deliver a baby at 4 o'clock on a cold, rainy morning.—R.B.K.



POSTGRADUATE CALENDAR

THE THYROID AND RELATED PROBLEMS

University Medical Center, Jackson
September 12, 1967, beginning at 9 a.m.

This program will feature a detailed review of the anatomy, physiology, and pathology of the thyroid gland in addition to discussions on medical and surgical aspects of hyperthyroidism. Other topics will be the relation of thyroid function to problems in gynecology and in pregnancy, tumor of the thyroid, hypothyroidism and radiologic aspects of thyroid problems.

CURRENT PRACTICES IN THE MANAGEMENT OF BILIARY TRACT PROBLEMS

University Medical Center, Jackson
September 22, 1967, beginning at 9:30 a.m.

Dr. Frank Glenn, professor of surgery at Cornell University, will be the guest lecturer at this seminar. He is one of the most outstanding American authorities on surgical management of biliary tract problems.

ARTHRITIS SEMINAR

University Medical Center, Jackson
October 12-13, 1967

Sponsored by the Mississippi Chapter, Arthritis and Rheumatism Foundation and The University of Mississippi School of Medicine

Thursday Morning

CLINICAL DIAGNOSTIC ASPECTS OF RHEUMATOID ARTHRITIS

C. H. Wilson, Jr., M.D.

LABORATORY DIAGNOSTIC ASPECTS OF RHEUMATOID ARTHRITIS

Frederic C. McDuffie, M.D.

Thursday Afternoon

RADIOLOGIC DIAGNOSTIC ASPECTS OF RHEUMATOID ARTHRITIS

Robert Freiburger, M.D.

INDICATIONS FOR SURGERY IN MANAGEMENT OF RHEUMATOID ARTHRITIS

Adrain E. Flatt, M.D.

Friday Morning

STILL'S DISEASE AND UNUSUAL MANIFESTATIONS OF RHEUMATOID ARTHRITIS

C. H. Wilson, Jr., M.D.

RADIOLOGICAL ASPECTS OF STILL'S DISEASE AND UNUSUAL MANIFESTATIONS OF RHEUMATOID ARTHRITIS

Robert Freiburger, M.D.

Friday Afternoon

ORTHOPEDIC MANAGEMENT OF RHEUMATOID ARTHRITIS

Adrian E. Flatt, M.D.

MEDICAL TREATMENT OF RHEUMATOID ARTHRITIS

Frederic C. McDuffie, M.D.

FUTURE CALENDAR

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRACTICE

October 27

SEMINAR FOR NURSE ANESTHETISTS

November 10

SYMPOSIUM ON HAND INJURIES

November 30

DIAGNOSIS AND MANAGEMENT OF THE ANEMIC PATIENT

December 8

CARDIOPULMONARY RESUSCITATION

December 14

MODERN MANAGEMENT OF COMMON OBSTETRICAL COMPLICATIONS

January 5, 1968

OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE

January 25, 1968

ALIMENTARY TRACT PROBLEMS

February 1, 1968

UMC DAY

February 15, 1968

CLINICAL NEUROLOGY

March 1, 1968

SEMINAR ON RENAL DISEASES

March 14, 15, 1968

RELIGION AND MEDICINE

March 27-29, 1968

CARDIOVASCULAR SEMINAR

April 11, 1968

DIABETES SEMINAR



PERSONALS

JERRY R. ADKINS has announced the opening of offices at 1160-B West Howard Ave. in Biloxi where he will limit his practice to general and thoracic surgery. The Laurel native is a graduate of the University of Mississippi School of Medicine, and he received his surgical training at UMC. He is a former co-recipient of the Hektoen Silver Medal, the second highest AMA award for a scientific exhibit. He was in military service with the U. S. Navy, serving in the Pacific.

BILL J. BIRD has opened offices at 405 Reynoir St. at Biloxi where he will limit his practice to psychiatry. He received his M.D. from the University of Oklahoma School of Medicine, and he underwent postgraduate specialty training at the Menninger Clinic and the Langley-Porter Neuropsychiatric Institute, a division of the University of California Medical Center at San Francisco.

E. E. BOBO has announced the association of CHARLES O. WILLIAMS in practice with offices in the Bright Shopping Center at Jackson.

C. D. BOUCHILLON of Laurel has announced the association of PHIL NELSON in the practice of radiology at the Jones County Community Hospital.

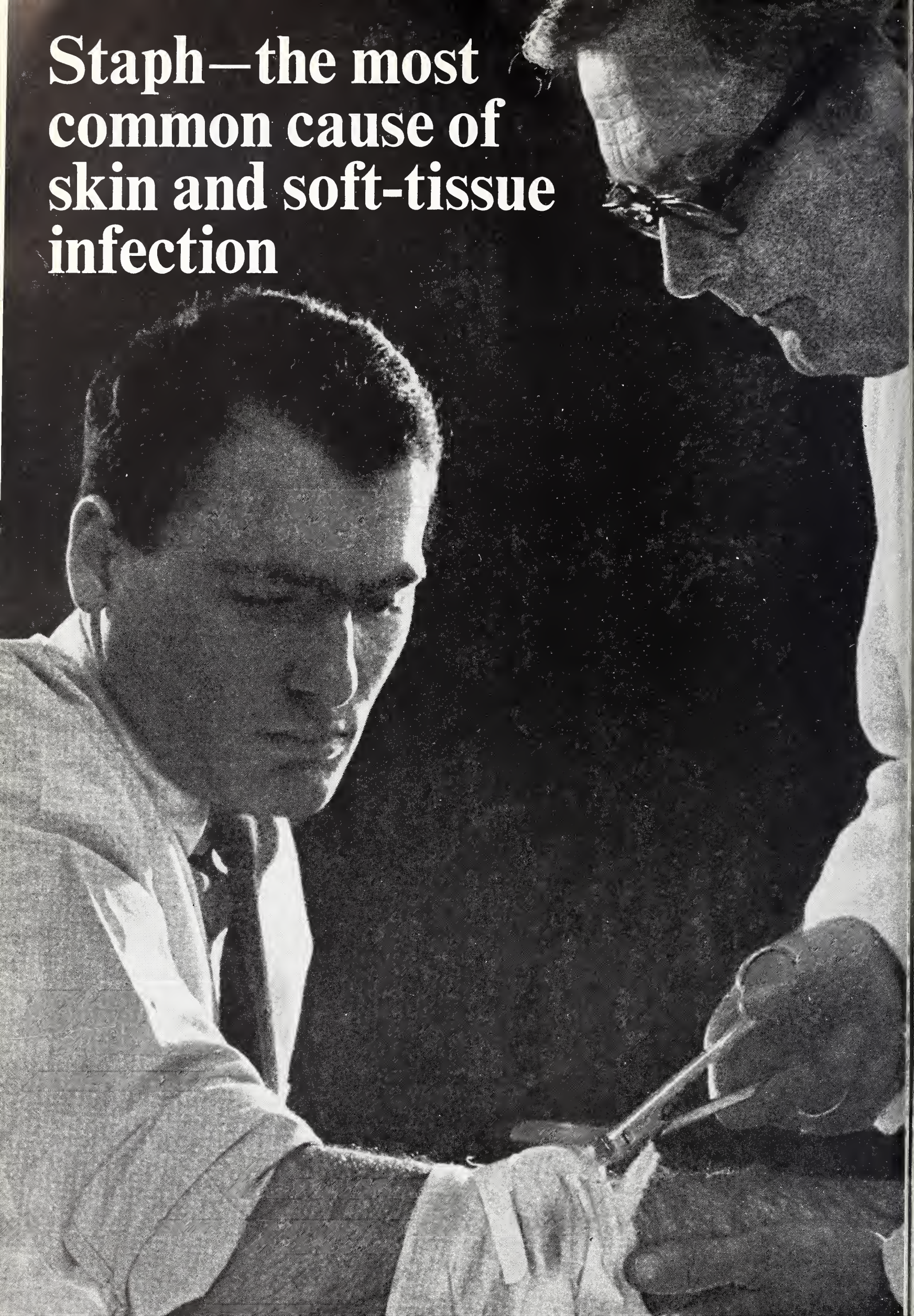
H. D. BROCK and A. J. YATES have opened their offices for practice limited to pediatrics in the Hinds Professional Building at 1815 Hospital Drive in Jackson.

RALPH L. BROCK of McComb is serving as commissioner of the Rotary Club Senior Baseball League. The project, which includes junior and senior leagues based on age, is providing 130 McComb boys with the opportunity to participate in the summer baseball program.

HARRY E. BURROW, JR., of Pascagoula has opened offices in the Hospital Road Medical Arts Building. He will limit his practice to otolaryngology and maxillofacial surgery.

JACK Q. CAUSEY has joined the staff of the Field Clinic at Centreville. He received his premedical education at Mississippi College, his medical training at the Tulane University School of Medicine, and his postgraduate training in internal medicine at New Orleans Charity Hospital under the Tulane faculty.

Staph—the most common cause of skin and soft-tissue infection



reliably controlled with specific therapy



suitable dosage form for every staph situation

staph—the most common cause of skin and soft-tissue infection—also is responsible for many more serious infections, such as pneumonia, osteomyelitis, and septicemia. Often, a seemingly minor skin infection is the source of metastatic spread to deeper structures. When findings on culture incriminate staph as the cause, Prostaphlin (sodium oxacillin) will provide specific effective therapy.

Bactericidal effectiveness. Hardly a staph organism can resist the bactericidal action of Prostaphlin (sodium oxacillin), as shown by a 34-month *in vitro* study. Of all staph isolates tested, 99.5% were sensitive to oxacillin.¹

Clinically proven. There is a high correlation between these *in vitro* findings and clinical results. Of 610 patients treated with Prostaphlin (sodium oxacillin), 89.8% were reported cured or improved, including those with staph infections resistant to penicillin G.² And since resistance does not appear to develop *in vivo*, therapy with oxacillin can be extended when necessary.

Outstanding safety record. Besides being staph-specific and rapidly absorbed—Prostaphlin (sodium oxacillin) has established an outstanding record of safety during five years of widespread clinical use. Continuous high blood levels of oxacillin have not produced toxic effects on kidney function, assuring a significant margin of safety. However, as with all penicillins, the possibility of allergic response should be considered.

Capsules, Oral Solution and Injectable. Prostaphlin (sodium oxacillin) is available in three flexible dosage forms to suit the age of the patient and severity of infection—capsules, an oral solution for pediatric use, and multi-dose vials for injection, I.M. or I.V.

PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY 8:12.16
References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N.Y. 2. Data on file, Bristol Laboratories.

BRISTOL

BRISTOL LABORATORIES/Division of Bristol-Myers Co., Syracuse, N.Y.

Whenever you
suspect staph
PROSTAPHLIN®
SODIUM OXACILLIN

PERSONALS / Continued

KENNETH M. CLEMENTS, JAMES E. GILBERT, and ARTHUR J. ROBERTS of the Gulfport Veterans Administration Hospital have received academic appointments in three educational institutions. Dr. Clements, chief of physical medicine and rehabilitation at the Gulfport VA, was named to the University of Southern Mississippi faculty. Dr. Gilbert, associate chief of staff, received an appointment as clinical assistant professor of psychiatry at LSU School of Medicine. Dr. Roberts, chief of staff, was named clinical assistant professor of psychiatry both at LSU and UMC at Jackson.

W. MONCURE DABNEY and DONALD A. HOPKINS of Crystal Springs have announced their association in general practice under the name of the Dabney-Hopkins Clinic with offices at 210 Lee Ave.

L. STACEY DAVIDSON, JR., has opened his offices at 800 First St., Cleveland, where he limits his practice to ophthalmology.

A. F. DUGGER, JR., was recently installed as president-elect of the Waynesboro Rotary Club.

H. M. FAIRCHILD of Jackson has announced the association of DEAN R. McMILLAN in general practice. Their offices are located at 820 Cooper Road.

JAMES S. FISACKERLY of Biloxi attended the 53rd Annual Postgraduate Course in Ophthalmology sponsored by the University of Colorado School of Medicine July 2-7, 1967. The advanced academic session was conducted at Colorado Springs and was attended by 227 ophthalmologists from 33 states.

RICHARD C. FLEMING of Meridian has announced the removal of his offices to 1316-21st Ave. He limits his practice to internal medicine.

JOHN G. FORSHNER has opened his offices in the Medical Tower at 440 East Woodrow Wilson Drive in Jackson. He will limit his practice to dermatology.

RICHARD T. FURR has announced the association of FRANK G. GARBIN in practice at 1800 Government St. in Ocean Springs.

LEO GIBSON has become associated with CLAUDE J. BLACKBURN at 517-5th Ave. in Picayune in the practice of obstetrics and gynecology.

CLYDE H. GUNN, JR., has announced the opening of his offices for the practice of general surgery at 605 Park St., Moss Point.

L. C. HANES of Jackson has announced the opening of his offices in the Medical Tower at 440 East Woodrow Wilson Drive where he will limit his practice to psychiatry.

MARVIN V. HARVEY of McComb has announced that his practice has been limited to general surgery. His offices are located at 205 North Front St.

MARCUS L. HOGAN, III, has become associated with the Hattiesburg Clinic at 415 S. 28th Ave. He limits his practice to obstetrics and gynecology.

RAYMOND V. LASSEN, JR., has become associated with RICHARD S. HOLLIS at the Physicians and Surgeons Clinic in Amory where he practices obstetrics and gynecology. ROBERT J. COLE of Amory has announced his relocation for the practice of general surgery at the Amory Clinic.

BLANCHE LOCKARD and WILLIAM B. WIENER of Jackson have announced the association of MARY E. HAWKINS in their clinic at 500-G East Woodrow Wilson Drive. The group limits its practice to obstetrics and gynecology.

FLOYD L. LUMMUS and ANTONE W. TENNEHILL, JR., of Tupelo have announced the opening of their office for the practice of internal medicine in the Professional Building.

JOHN E. MANN has become associated with the Van Winkle Medical Clinic at 4304 Highway 80 West, Jackson, where he will practice general medicine.

D. H. MOORE, SR., and D. H. MOORE, JR., of Meridian have announced the association of E. LOWRY MOORE in their offices at 1303-25th



"How long have you had this desire to be a mechanic?"

Ave. The group limits its practice to ophthalmology.

PAUL H. MOORE of Pascagoula has been installed as president of his Rotary Club. Dr. Moore limits his practice to radiology at the Singing River Hospital.

CARL PASSMAN of Natchez has announced the removal of his offices to the Medical Arts Building where he continues to limit his practice to orthopaedic surgery.

GUY H. ROBINSON has announced the opening of his offices at 410 Catchings St. in Indianola.

EDWARD V. ROSS has joined the staff of Howard Memorial Hospital at Biloxi as an associate in radiology and nuclear medicine with PAUL L. HORN, JR. Dr. Ross received his medical degree from the Tulane University School of Medicine and his specialty training at the Ochsner Foundation Hospital at New Orleans.

JAMES E. SAFLEY of Brookhaven has assumed his duties as director of the Departments of Public Health in Lincoln, Lawrence, and Franklin counties. He is a medical graduate of the Tulane University, and he completed his residency training in obstetrics and gynecology on the Tulane service

at the New Orleans Charity Hospital. He has practiced at Brookhaven since 1952 and is a Fellow in the American College of Obstetrics and Gynecology.

LEO J. SCANLON, JR., of Natchez has announced the association of ALLEN M. READ in the practice of pathology.

J. O. WOOD has announced his association with McComb hospitals for the practice of radiology.



The following physician has been elected to membership by his respective component medical society in the Mississippi State Medical Association and the American Medical Association.

SANTINA, HENRY, Tuscaloosa, Ala. Born Chicago, Ill., May 16, 1914; M.D., Marquette University School of Medicine, Milwaukee, Wisc., 1944; interned U. S. Naval Hospital, Treasure Island, Calif., 10 months; residency, Forensic Path Piedmont Hospital, Atlanta, Ga.; elected June 13, 1967, by Prairie Medical Society.

*When the problem
is only skin deep*

USE 'POLYSPORIN'[®] brand POLYMYXIN B-BACITRACIN OINTMENT

**for topical antibiotic therapy with minimum
risk of sensitization**

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in 1/2 oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.



BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.







This pain is getting on my nerves.

Patients in pain often experience concomitant anxiety and tension, which may add to the burden of pain.

For such patients, you may want to prescribe a preparation that offers more than simple analgesia.

A good choice is often EQUAGESIC® (meprobamate and ethoheptazine citrate with aspirin). It helps relieve pain. And anxiety. And skeletal muscle spasm as related to pain or anxiety and tension.

Equagesic® TABLETS (meprobamate and ethoheptazine citrate with aspirin)



Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore it should be used in pregnant patients or women of child-bearing age only when the physician judges its use essential to the patient's welfare.

Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with immediate gastric lavage and appropriate supportive therapy (CNS stimulants and pressor amines as indicated).


Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness. Overdosage may result in CNS depression (drowsiness and lightheadedness) or CNS stimulation and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]). Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angio-neurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically such as with epinephrine, antihistamine and possibly hydrocortisone. A few cases of leucopenia, usually transient, have been reported following continuous use. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.


Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.


Wyeth Laboratories Philadelphia, Pa.



DEATHS

 PENNEBAKER, DAVID M., New Albany. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1940; interned St. Louis City Hospital, St. Louis, Mo.; died July 18, 1967, aged 59.

 TERRY, HAL MABRY, Goodman. M.D., Atlanta College of Physicians and Surgeons, Atlanta, Ga., 1902; interned Henry Grady Hospital, Atlanta, Ga.; Emeritus member of MSMA and member of Fifty Year Club; died July 4, 1967, aged 85.

 WHITFIELD, RICHARD NOBLE, Florence. M.D., University of Nashville, Nashville, Tenn., 1905; post graduate Johns Hopkins, Baltimore, Md.; member Mississippi Public Health Association; past president Mississippi Public Health Association; past president American Federation of State Medical Boards; Emeritus member of MSMA and member of Fifty Year Club; died June 30, 1967, aged 88.

Wyeth Fellowship Program Is Opened

Applications for two-year Wyeth Pediatric Fellowships are available now for residencies commencing July 1, 1968, it was announced by the chairman of the Selection Committee, Dr. Philip S. Barba, past president of the American Academy of Pediatrics, of Philadelphia. All applications for this, the 11th group of fellowships, must be in the hands of the Committee by Dec. 1, 1967.

Sponsored by the Wyeth Fund for Postgraduate Medical Education, each of these fellowships provides \$4,800 over two years toward the advanced training required for board certification in pediatrics. Wyeth's monthly payments, made directly to recipients, are in addition to the usual stipends paid to residents by the institutions in which they train.

Eligible to apply are interns, physicians who have recently completed an internship, research fellows, or physicians completing their tour of duty with the armed services or the U. S. Public Health Service. Applicants must be citizens of the United States or Canada. Those who have already

started pediatric residency training are not eligible. In the first nine years of the Wyeth fellowship program, 176 physicians have received its assistance toward their advanced training.

SBH Certifies Medicare Providers

One hundred twenty-seven providers of care have been certified by the Mississippi State Board of Health as meeting requirements for participation in the Medicare program. Numbered among them are 77 hospitals, 32 home health agencies, and 18 extended care facilities.

The listing was released by Harold H. Whitaker of Jackson, supervisor of the SBH Health Insurance Unit. This office carries out inspections as required by Sec. 1864 of Title XVIII, Public Law 89-97, as to an applicant institution or agency meeting requirements for Medicare participation. Actual certification is made by the Social Security Administration after consideration of the state unit's findings and recommendations.

Whitaker said that five of the 18 extended care or nursing home facilities were located in Jackson, and only five are located north of U. S. Highway 80. The remainder are in the southern part of the state.

Of the 32 home health agencies, all but two are operated by county health departments. The latter are operated by the North Mississippi Community Hospital at Tupelo and the North Sunflower Hospital at Ruleville.

Home health agencies operated by county health departments in Alcorn, Attala, Claiborne, Coahoma, DeSota, Forrest, Grenada, Harrison, Humphreys, Jackson, Jones, Lauderdale, Marshall, Monroe, Neshoba, Noxubee, and Pike counties.

Others are in Benton, Covington, Hinds, Jasper, Lafayette, Leflore, Lincoln, Pontotoc, Rankin, Washington, Winston, Yalobusha, and Yazoo counties.

Of the 77 certified hospitals, 52 are located on or north of U. S. Highway 80 with the highest concentration in the east-northeast section of the state. There are three at Vicksburg, two at Jackson, and two at Meridian. Six hospitals on or immediately near the Gulf Coast are certified with a majority of the 25 concentrated in the south central-southern region.

Most notable blanks on the map are in southwest Mississippi and northward along the Mississippi River.



THE LITERATURE

Book Reviews

Textbook on Medicine, 12th Edition. Edited by Paul B. Beeson, M.D., Nuffield Professor of Clinical Medicine, University of Oxford; and Walsh McDermott, M.D., Livingston Farrand Professor of Public Health, Cornell University Medical College. 1738 pages with illustrations. Philadelphia: W. B. Saunders Company, 1967. \$20.50.

Few physicians in active practice today fail to recognize the association of the name "Cecil" with a textbook on Medicine. The first edition was published exactly 40 years ago. This, the 12th revision, maintains the practice of a new edition every three or four years. Dr. Russell Cecil, the first editor, died in June, 1965. However, the tradition of the Department of Medicine of Cornell University Medical College is maintained in the present list of Editors and Associate Editors.

The comprehensive nature of the textbook is demonstrated in the list of 169 different contributors, 52 of which are new, replacing a like number who have retired. Each contributor could be considered an authority in his field, and the list is an impressive one. Many sections have been completely re-written. The discussion on fluid and electrolyte balance is completely new. The section on "Diseases of the Nervous System" has been completely revised by the associate editor, Dr. Fred Plum. In the entire book, 226 of the articles are newly written and 57 are on subjects not included in the last edition.

The table of contents is extensive and well organized. Each section is outlined into component subjects and only a brief review is an instant reminder of the extent of modern medical knowledge. The editors have done an excellent job placing the information in a systematic manner. This alone makes a fine introduction to Medicine for the beginning student or rapid review for the busy practitioner.

Diseases common to various sections of the world are included giving the book international

interest. With the vast increase in international level, we need to have access to medical information about all diseases no matter where they occur.

The latest theories in the field of genetics and recent advances in aero-space medicine are included. It is a large book which is not surprising when you look at the long list of subjects included. Comparisons were made with the 7th edition published 20 years ago. One of the first things you notice is the smaller print and decrease in the number of illustrations. Nearly three times the space is required to list normal values for laboratory examination now available in the new edition. The entire book is 1738 pages.

No physician's library should be without a comprehensive book on Medicine. This 12th edition will make an excellent selection for the beginner or seasoned practitioner.

RALPH L. BROCK, M.D.

Pathologic Physiology: Mechanisms of Disease. By William A. Sodeman, M.D.; and William A. Sodeman, Jr., M.D. 1051 pages with illustrations. Philadelphia: W. B. Saunders Co., 1967. \$19.00.

The stated objective of the Drs. Sodeman in presenting the fourth edition of *Pathologic Physiology: Mechanisms of Disease* is to bridge the gap between texts devoted to physiology and to medicine so that the practitioner may better comprehend clinic states in the light of disturbed physiological processes. This admirable goal is eminently desirable; it is difficult to achieve. The new edition of this now standard work, compiled with the assistance of a group of highly qualified contributors, is uneven in dissertation, providing some chapters which are sketchy and incomplete and others that border on being relatively over detailed. Nevertheless, this volume is the best compendium available in the field and will prove rewarding to the reader no matter what his special sphere of interest.

Sections throughout the treatise suffer from a dearth of illustrations, diagrams and charts. The

exposition is thereby severely handicapped. A picture is still worth a thousand words: the editors would be well advised to recall this maxim in their preparation of edition number five. The brief selected bibliography appended to each chapter is not annotated, which proves to be an annoyance. A succinct introductory section devoted to bodily reaction to stress is followed by a chapter on sub-cellular biology and pathologic physiology which is not only incomplete (e.g. not single mention is made of the lysosome and the profound effects eventuating from its derangement) but will be downright confusing to the reader who has no prior knowledge of cellular ultramorphology. Diagrams would have been particularly helpful to the uninitiated here. Sir F. M. Burnet presents a superb and easily understood chapter on autoimmune disease and Gendel's discussion of the relation between faulty genetics and disease states is adequate and concise.

The sections on metabolism are uniformly good. Ray's chapter devoted to fluid and electrolyte balance is a marvel of compactness and clarity. This essay is highly recommended for a brief review of this vital subject. Reifenshtein's section on endocrinology is a gem in miniature with an added fillip of therapeutic recommendations (although the book supposedly does not deal with treatment). Much of the newer knowledge dealing with infection and allergy has been compressed into a five chapter section. Two beautifully written chapters follow dealing with the response to physical and toxic agents, including expository segments on the laser, hyperbaric medicine, ultrasonics and aero-space medicine, as well as irradiation, and with chemical agents which induce disease. A greater understanding of intracellular biology and enzymology can be gained by a careful perusal of this segment.

Most of the sections dealing with the cardiovascular system are excellent. Hemodynamics, cardiac metabolism and function, electrocardiography, and vectorcardiography are well set forth. A good number of illustrations is a considerable asset. The important topic of shock is dealt with in a most cursory and incomplete manner. Catecholamine metabolism is poorly presented and the hemodynamics of bacterial shock largely ignored.

A relatively brief segment is devoted to pulmonary dynamics. This section is well done, however, considering the emphasis given. The section on the esophagus and stomach are somewhat off-hand in manner, and unsatisfying. No clear understanding of normal swallowing mechanism or of its alteration in various disease states is given. The vital

subject of motility is largely ignored. Gastric emptying is not dealt with. The important knowledge of the mechanism of acid absorption from the stomach is barely mentioned. The small bowel, colon, liver, and pancreas are beautifully covered and exceptionally up to date. In the latter two sections a lack of illustrations is a drawback. The x-ray reproductions on page 652 are upside down.

Corcoran and Weller deal with renal pathophysiology in only 28 pages. This is a remarkable achievement, particularly since the topic is beautifully covered and is an ideal of lucidity. The counter current mechanism may be easily grasped after careful reading; no higher recommendation can be given than this! A disproportionate amount of space is allocated the hematological section. The writing is current and smacks of authority. Despite their importance it is unfortunate that the topics were not compacted in order to balance the emphasis devoted to other systems. The musculoskeletal system is disappointing, patchy and incomplete. The biochemical disturbances arising in polymyositis, for example, can be found only after perusing the section on neurology. The collagen diseases are given scant attention. Newer knowledge of muscle contraction and its pathophysiology is not included. Gout is poorly delineated, with no discussion of uric acid metabolism or the electrochemical disturbances developing which culminate in the gouty state. The final section devoted to the nervous system is quite good. An adequate reacquaintance with neurology can be obtained from this chapter.

It is admittedly difficult to present an opus providing the most up to date knowledge on the entire spectrum of disturbed physiology and its clinical manifestations. One can but admire the ambition of the editors. Comparing the first edition of this work with the current volume, one is struck by the truly explosive burgeoning of knowledge accruing during the 17 years intervening. One could wish for a more uniform approach throughout the book and that each author had included information dealing with cellular and ultracellular derangements. The fact that the writing is, perhaps necessarily, dogmatic and that controversial topics are largely ignored, is a fault not easily corrected in a text such as this. Full discussion both pro and con, as well as information in depth can be adequately provided only in monographs and review articles.

Despite its drawbacks, the fourth edition of *Pathologic Physiology* is a unique work. Consulting its pages will allow many a practitioner to better understand the perplexing clinical manifestations of disease.

E. LEONARD POSEY, M.D.



Politics and Poverty Pervade Hunger Hearings Before Senate Subcommittee

Hearings conducted by the Senate Subcommittee on Employment, Manpower, and Poverty produced acrimonious testimony aimed at Mississippi and the south which was refuted by six witnesses from the state. The hearings, presided over by Sen. Joseph S. Clark (D., Pa.), were conducted in a circus atmosphere with continual coverage by the three television networks, Washington and New York TV, and a corps of press correspondents and photographers.

Sen. James O. Eastland and Sen. John Stennis led positive and rebuttal testimony for the state, drawing high praise from the state medical association, state government officials, and the Mississippi press.

Dr. William E. Lotterhos and Rowland B. Kennedy, both of Jackson, appeared as witnesses for the association. Drs. A. L. Gray and Frank J. Morgan, Jr., of Jackson were witnesses for the State Board of Health.

First day hearings kicked off with a morning presentation by six physicians representing the Field Foundation during which they made a scathing indictment of Mississippi, alleging an unbelievably poor state of health and nutrition among Negro children. Their report to the subcommittee, which also described widespread disease among the children, said that "mass starvation" existed in the state.

The Field Foundation team included Drs. Mil-



Sen. John Stennis makes a forceful point at the Senate "hunger hearings." Mississippi witnesses are, from the left, Sen. James O. Eastland, Rowland B.

Kennedy, Drs. William E. Lotterhos, A. L. Gray, Frank J. Morgan, Jr., and Sen. Stennis. (United Press International photo)

ORGANIZATION / Continued

ton J. E. Senn, Yale pediatrician; Alan Merman, also a Yale pediatrician; Joseph Brenner of the Massachusetts Institute of Technology; Robert Coles of Harvard University; Raymond Wheeler, a Charlotte, N. C., internist and civil rights leader; and Cyril A. Walwyn of Yazoo City, medical adviser to Friends of the Children of Mississippi.

The six physicians reported visiting six counties in Mississippi over a period of about three days during which they made their findings.

Afternoon sessions on the first hearing day were given over to Mississippi witnesses. Both senators spoke forcefully in denial of the charges, as did witnesses for the state medical association and State Board of Health. MSMA testimony revolved around a study of more than 560 general practitioners and pediatricians wherein it was discovered that nutritional disease among children in the state poses no significant health problem.

Dr. Gray told the subcommittee of the broad program of public health services and of special projects under the State Board of Health designed to furnish special care for the needy in the Delta area.

Other key witnesses included Dr. William H. Stewart, U. S. Surgeon General, who blasted Mis-



Enroute to Washington for the hearings, Sen. James O. Eastland and Dr. William E. Lotterhos discuss testimony plans.

issippi by telling the subcommittee that "before you have finished with this problem, you will be asking when a state is so poor or, conceivably, so unwilling, that the federal government must exercise a federal responsibility to its citizens."

He charged that "hunger has existed in Mississippi for a long time and the only novelty may be that we wish no longer to tolerate it."

Taking an opposite tack, Agriculture Secretary

Orville L. Freeman defended the state as having a complete food stamp and commodities program in every county. He engaged in a sharp verbal exchange with Sen. Jacob K. Javits (R., N. Y.), telling him that there is hunger in New York state and counties there with no food programs for the needy.

Other witnesses included OEO Director Sargeant Shriver and Assistant HEW Secretary Lyle Carter.

Overtone of the hearings was a bitter controversy between the Johnson administration and the Kennedy-Shriver poverty program axis. The hassle pits the administration and the established, official agencies of government against the free-swinging poverty program of OEO.

Members of the subcommittee include, in addition to Sen. Clark, Senators Jennings Randolph (D., W. Va.), Claiborne Pell (D., R. I.), Edward M. Kennedy (D., Mass.), Gaylord Nelson (D., Wis.), and Robert F. Kennedy (D., N. Y.).

Minority members, in addition to Sen. Javits, are Sen. Winston L. Prouty (R., Vt.) and George Murphy (R., Calif.).

In a surprise followup, Sen. Stennis introduced S. 2138 which called for appropriation of \$10 million to provide food and emergency medical services for any citizens where suffering and possible loss of life are threatened. Democratic leaders of the subcommittee were then faced with a choice of remaining silent and confirming that the entire hearing was an exercise in political theatrics or the equally distasteful alternative of supporting Stennis.

Choosing the latter, Senators Clark, both Kennedys, and Javits associated themselves with Sen. Stennis, and the subcommittee approved the measure in one day, upping the authorization to \$25 million.

The parent Senate Committee on Labor and Public Welfare, chaired by Sen. Lister Hill (D., Ala.), acted the next day to approve and bring the measure to the Senate floor with a whopping \$75 million appropriation. The bill passed the Senate by a unanimous vote on Aug. 2 with the support of Sen. Mike Mansfield (D., Mont.), majority leader and chief administration spokesman in the upper house.

On the Mississippi scene, a joint committee of the state medical association and the University Medical Center toured four Delta counties, finding no mass starvation but underscoring needs in housing, sanitation, some areas of medical care, and job opportunities. The group's report to Governor Johnson was released by the chief executive in early August.



Photo professionally posed

Mike expects a penicillin injection. He's about to be pleasantly surprised.

His physician is going to prescribe an oral penicillin —PEN·VEE® K (potassium phenoxymethyl penicillin). It's usually so rapidly and completely absorbed that therapeutic serum levels are produced in 15 to 30 minutes. Higher serum levels generally last longer than with oral penicillin G.

Indications: Infections susceptible to oral penicillin G: prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.

Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.

Adverse Reactions (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").

Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

ORAL **PEN·VEE® K**
(potassium phenoxymethyl penicillin)



Blue Plan Offers New Contracts

The Mississippi Hospital and Medical Service, Blue Cross-Blue Shield, has announced the availability of six new contracts for nongroup enrollees. The plan said that the new contracts became available on July 1.

The benefit ranges offered, according to information released, includes daily hospital room allowance of \$12, \$16, and \$20, plus \$225 and \$300 surgical schedules. Medical benefits are \$4 and \$5, beginning on the first day of inpatient care, the announcement said.

Enrollment may be completed by mail, the statement continued, and no enrollment fee is required. Kits have been made available on the new contracts, containing descriptive literature, application forms, and mailing envelopes.

Cancer protection is also available through this new plan, and persons aged 65 and over can secure coverage on a nongroup basis for senior citizens under the Senior Med supplement to Title XVIII Medicare benefits.

Heart Association Names New Officers



New officers of the Mississippi Heart Association are, from the left, seated, Rep. G. V. Montgomery of Meridian and Washington, president; and Dr. J. P. Tatum of Meridian, president-elect. Standing are Donald Bartlett of Como, vice president; Dr. G. Spencer Barnes of Columbus, secretary; and Ray R. McCullen of Jackson, treasurer.

Dr. Purvis Speaks at AMA Congress

Dr. George D. Purvis of Jackson will address the 27th Annual Congress on Occupational Health sponsored by the American Medical Association, September 25-26 at Atlanta. Scene of the meeting is the new Regency Hyatt House.

Dr. Purvis is slated to discuss the study of occupational health programs in small plants in Mississippi, describing both the study technique and findings. He is chairman of the state association's Committee on Occupational Health.

Sponsored by the American Medical Association's Council on Occupational Health, the two-day Congress will be held at the Regency Hyatt House.

Following an opening address by Milford O. Rouse, M.D., AMA president, the conferees will begin their examination of health problems in eight key areas. These include:

- Small plant problems.
- Occupational health programs for government employees.
- Responsibility of the physician in off-the-job accident prevention.
- Screening in occupational medicine.
- Occupational health in agriculture.
- Epidemiology of occupational medicine.
- Cooperation between medical societies and workmen's compensation administrators.
- Psychologic problems in occupational medicine including a discussion of alcoholism in industry.

A Congress highlight will be the presentation of the Annual Physician's Award of the President's Committee on Employment of the Handicapped during pre-luncheon ceremonies Sept. 25.

Title XIX Brochures to Members, Candidates

Two association-developed brochures on Title XIX were distributed to members of the association and candidates for the legislature in the August Democratic primaries in accordance with an action of the House of Delegates at the 99th Annual Session. Dr. Temple Ainsworth of Jackson, president, said that the total distribution was about 6,000 copies.

A brochure explaining the concept and approach of Title XIX in furnishing medical care for the needy was developed for use in the series of regional information meetings conducted from

February through April of 1967. The second brochure outlines the association's six point positive policy on Title XIX implementation in Mississippi, as adopted by the House of Delegates.

The mailing to the membership was accompanied by a letter from Dr. Ainsworth urging that physicians discuss the program with candidates for election to the legislature. He said that "it is our purpose to secure enactment of a medically-oriented Title XIX program."

Earlier this year, regional information meetings were co-sponsored by the association and 15 of the state's 17 component medical societies at Natchez, Hattiesburg, Biloxi, Brookhaven, Greenwood, Oxford, and Tupelo.

Hospital Costs Rate Doubles, Says AHA

Hospital expenses, especially payroll, are increasing at a rate more than double that experienced six months ago, it was disclosed by the American Hospital Association.

In the annual Guide Issue of the Journal of the American Hospital Association, statistics gathered from the nation's 5,812 community hospitals show a total expense per patient day of \$48.15 for the reporting year ending Sept. 30, 1966, or an increase of 8.3 per cent over the previous year. Since the end of the reporting year AHA's monthly sample of community hospitals. "Hospital Indicators," has recorded an increase of 8.5 per cent, to \$53 in hospital expense per patient day for the period from Oct. 1966 through March 1967.

Dr. Edwin L. Crosby, director of AHA, said "Wage and salary increases in hospitals during this last half of the current reporting year (ending Sept. 30, 1967) are likely to continue at the October-March rate, which would result in an increase of at least 17 per cent in total hospital expense per patient day for 1967."

Earlier this year the AHA, in testimony before the House Ways and Means Committee, projected a total hospital expense per patient day figure of \$57.93 by Sept. 30, 1967. This would represent an increase of 18.6 per cent over the previous year.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761

when bursitis hits a 280-lb. tackle, hit back with Butazolidin alka



Indications: Osteoarthritis, rheumatoid arthritis, rheumatoid spondylitis, psoriatic arthritis, acute gout, painful shoulder (peritendinitis, capsulitis, bursitis and acute arthritis of that joint), acute superficial thrombophlebitis.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, and those responsive to routine measures as well as contraindications. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not receive the recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if white count changes significantly, granulocytes decrease, or if abnormal forms appear. Use greater care in the elderly and in hypertensive patients.

Adverse Reactions: The most common are nausea, edema and rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued at the appearance of edema. The drug has been associated with pe-

100-lb. tackles — or 108-lb. housewives — Butazolidin alka can hasten recovery from the maddening pain of shoulder bursitis.

Check for every patient. Check carefully the Contraindications, Warning and Precautions shown below.

Adverse reactions may occur. The most common are nausea, edema and rash. However, agranulocytosis has been reported. All adverse reactions are listed below, too.

For-pay or workaday patients — when they come up with shoulder bursitis and your clinical judgment indicates Butazolidin alka — go with it.

Watch the comeback.



may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. A severe rash has also been reported. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent discontinuation of medication. Stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, the causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, delirium, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid dysfunction may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

6509-V(B)R2

Butazolidin[®] alka

Capsules

- 100 mg. phenylbutazone
- 100 mg. dried aluminum hydroxide gel
- 150 mg. magnesium trisilicate
- 1.25 mg. homatropine methylbromide

Dosage in painful shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

For complete details, please see full prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, New York



MSMA Life Group Gets Benefit Increase

Favorable experience with the state medical association's term life insurance group with the Continental Assurance Co. over the past 18 months will result in an increase of benefits with the premium levels remaining the same. This was the joint announcement of Dr. Temple Ainsworth of Jackson, president, and Dr. John B. Howell, Jr., of Canton, chairman of the Board of Trustees.

The association leaders said that the state administrator, Thomas E. Yates, III, of Jackson, had made a formal notification in behalf of the Continental Assurance Co. Members and all of their dependents insured under group policy G-10798 will enjoy a benefit increase of 10 per cent, the officials said.

For example, if a member carries \$40,000 on himself and full family coverage of \$5,000 on his wife and \$2,500 on his children, he will have \$44,000 on himself, \$5,500 on his wife, and \$2,750 on his children at the same premium.

The increased benefit becomes effective Oct. 1, 1967. The state medical association group, one of several with the Continental organization administered by the Yates agency, has about \$4 million in life insurance in force for about 15 per cent of the membership.

RMP Taps Dr. Cobb as Advisory Chairman

Dr. Alton B. Cobb of Jackson has been named the first chairman of the Mississippi Regional Medical Program advisory committee. The program has been approved by the National Institutes of Health as a UMC-based project and funded for planning over the first year at more than \$322,800, according to Dr. Guy D. Campbell of Jackson, coordinator.

Dr. Cobb, who is director of the Division of Chronic Illness Services of the Mississippi State Board of Health, will head the statutory committee which advises in the planning and implementation aspects of the program.

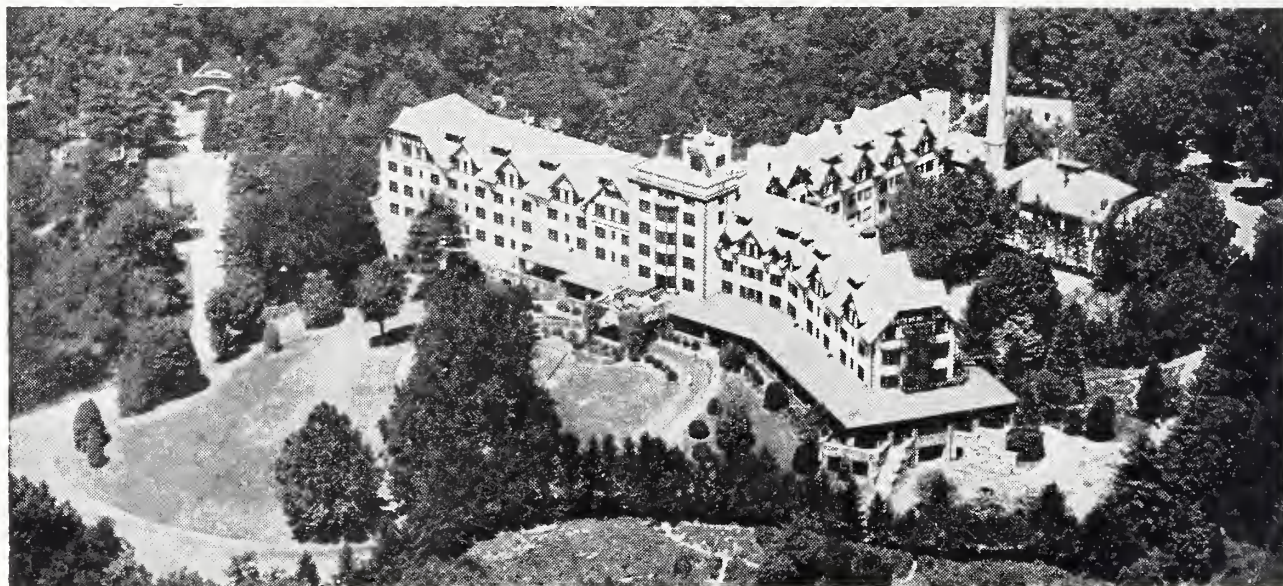
Other members are Dr. James L. Royals of Jackson, representing the state medical association.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.

ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.

MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

tion; Rep. G. V. Montgomery of Meridian and Washington, Mississippi Heart Association; Dr. Richard G. Burman of Gulfport and Joe Carson of Meridian, American Cancer Society, Mississippi Division; Dr. Robert E. Carter of Jackson, UMC; and Dr. Cyril A. Walwyn of Yazoo City, Mississippi Medical and Surgical Association.

S. D. Craig of Jackson, Mississippi Farm Bureau; Charles W. Flynn of Jackson, Mississippi Hospital Association; Flora Bain of Hattiesburg, Mississippi Nurses Association; James T. Connor, Jr., of Canton and James E. Fowler of Jackson, respectively representing the state and Jackson chambers of commerce; and Mrs. Helen Monroe of Itta Bena, Mississippi Valley Junior College.

Dr. John A. Peoples, Jr., of Jackson, Jackson State College; Walter Washington of Utica, Utica Junior College; Dr. Julius Ratliff of Jackson, Mississippi Dental Association; and Mrs. A. A. Raymond of Biloxi, W. O. Stanley of Jackson, and Dr. F. C. Flewellen, Jr., of Mississippi State University, all representing a wide spectrum of consumer and professional interests.

Tenodesis Splint Wins Alcoa Award

An unusual aluminum hand brace, which provides a grasping movement for the patient with hand paralysis and partial wrist function, is the 1967 Alcoa Student Design Merit Award winner at Stanford University.



Beardmore splint

Robert L. Beardmore of Pomona, Cal., won the award with a tenodesis splint which looks more like abstract art than the highly functional prosthesis it is.

Impaired function of hand and wrist may follow neck fractures or other serious neck injuries. Beardmore estimates there are more than 12,000 such impaired patients in the U. S. who must wear braces. In most cases, prognosis for improvement in hand function is poor, so a patient must wear a prosthesis for life.

Beardmore's splint is basically a large, specially shaped tweezers system that slips over the

hand and forearm. It is closed by a small spring, and activated by raising the wrist, the sole voluntary action possible in the lower arm of nerve-damaged patients. Besides its light weight, a main advantage of the aluminum splint over the conventional stainless steel and leather strap system is that it may be applied by the patient himself.

Beardmore discussed his design problem with physicians, therapists, and patients at Stanford University Hospital as he progressed with his winning entry. He learned that previous splints, though highly functional, were heavy, difficult to clean, and required the aid of another to attach. Therapists reported that many patients do not wear the splints because of their "mechanical hand" appearance, even though their ability to function would be improved.

The new flesh-colored appliance, made from Alcoa aluminum sheet, weighs 25 per cent less than the conventional tenodesis splint. Beardmore asserts his design (patent applied for) could be produced for less than \$50, compared to an average of about \$150 for the stainless steel-leather strap model in widespread use. Both splints require fitting.

Beardmore's design, when carefully fitted to the patient, may be used to pick up single sheets of paper, a virtual impossibility with conventional braces.

UMC Resident Wins SMA Training Grant

A University Medical Center resident in surgery is the recipient of one of 11 Southern Medical Association Residency Training Grants for 1967-68. This was the announcement of Dr. Guy T. Vise of Meridian, SMA president.

Dr. Jack L. Ratcliff is the Mississippi awardee. He is a graduate of the University of Mississippi School of Medicine, and he received his internship training at Mobile General Hospital.

SMA spokesmen said that the grant-in-aid principle has been followed in the Residency Training Grant program since its inception in 1962. Recipients, chosen on a basis of merit, assume no legal obligation to repay monies received. The fund, however, has been so organized that former recipients may make tax-deductible donations after they are in practice.

Other grants were made to residents in Louisiana, Maryland, Oklahoma, Kentucky, Texas, North Carolina, Georgia, and Virginia in 10 other major training centers.

AMA Occupational Health Survey Expanded

More than 5,000 physicians now are participating in a nationwide survey to learn more about industrial workers' adverse reactions to hazardous materials and sources of energy.

Organized by a committee of the American Medical Association's Council on Occupational Health, the survey may result in a national registry of these adverse reactions.

A pilot study started early this year was so successful that 2,000 more physicians have been added to the number reporting, bringing the total to 5,200. The group includes company physicians and those who are likely to have industrial employees among their patients. Ultimately, the survey will be extended to all physicians who may examine patients exposed to chemical and physical and biological agents that may cause adverse reactions.

The data collected will be analyzed and used for a large, computer-oriented study to provide information for the registry.

"If a usable and valuable registry can be developed, it is planned to publish the information for the benefit of the medical profession. Much of this information has never been published previously," said Dr. R. Lomax Wells of Washington, D. C., council chairman.

The AMA Council on Drugs has been collecting information on adverse reactions to drugs for some years. Those studies, however, have been primarily directed to the study of adverse reactions to drugs, household and economic chemicals rather than occupational exposures.

The study is being conducted by the Committee on Occupational Toxicology. The committee is part of the AMA's Council on Occupational Health.

Syntex Offer New Synalar Dosage Forms

Four dosage forms of Synalar (fluocinolone acetonide), a prescription topical corticosteroid, will soon be introduced in 60 gm. tubes for economy and convenience during prolonged therapy.

According to Peter Reckert, product marketing manager of Syntex Laboratories Pharmaceutical Division, prices to the retailer will be: Synalar

VALIUM[®] (diazepam)Roche[®]

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions)

Supplied: Valium[®] (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.



Roche Laboratories
Division of
Hoffmann-La Roche Inc.
Nutley, N.J. 07110



IMPORTANT NEW INSIGHTS INTO HUMAN RESPONSE TO EMOTIONAL STRESS:

new confirmation of the effectiveness of
Valium® (diazepam)

your Roche representative to arrange a
presentation of this important and fascinating
research into certain somatic responses to
emotional stress . . . quantitative, objective
measurement with double-blind controls.

See opposite page for important
describing information.



ORGANIZATION / Continued

Cream 0.01 per cent—\$3.00; Synalar Cream 0.025 per cent—\$6.00; Neo-Synalar Cream—\$6.50 and Synalar Ointment—\$6.00.

Reckert said the new 60 gm. tubes were made available to pharmacists during August.

ACP Sets Southern Regional Meet

The American College of Physicians (ACP) will hold a regional scientific meeting for specialists in internal medicine in six southeastern states Sept. 29-30.

The meeting will be held at the Cloister, Sea Island, Ga. Internists from Alabama, Florida, Georgia, Louisiana, Mississippi, and South Carolina are expected to attend.

The Southeastern Regional meeting is one of some 35 scientific-educational meetings sponsored during the academic year by the ACP. Held throughout the United States and Canada, the

meetings held keep the College's 13,600 members abreast of developments in the basic sciences and clinical medicine.

Among special guests will be Dr. Rudolph H. Kampmeier of Nashville, Tenn., ACP president and professor emeritus of medicine at Vanderbilt University and Dr. Edward C. Rosenow, Jr., of Philadelphia, Pa., ACP executive director.

The meeting is being planned under the general direction of Dr. Tully T. Blalock of Atlanta, ACP governor for Georgia and assistant professor of medicine, Emory University School of Medicine.

Dr. Davis Is UMC Psychiatry Instructor

Dr. Clifton B. Davis has been appointed as instructor in the Department of Psychiatry at the University Medical Center. He had previously been a resident in the department.

Dr. Davis received the M.D. degree from the University of Mississippi School of Medicine and took his internship at Chatham County Memorial Hospital at Savannah, Ga.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205-836-7201

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 42 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

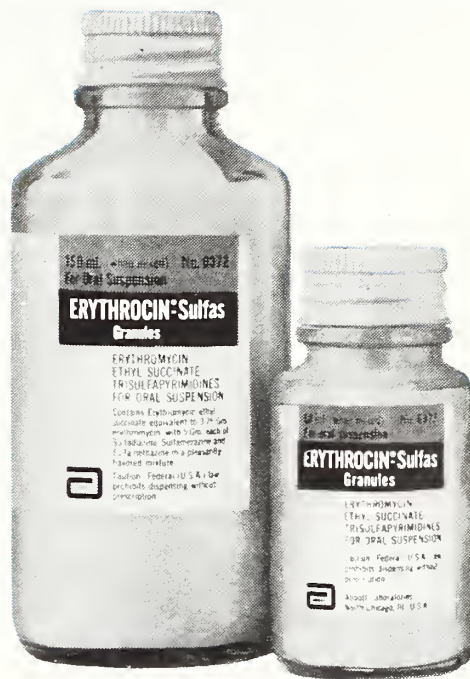
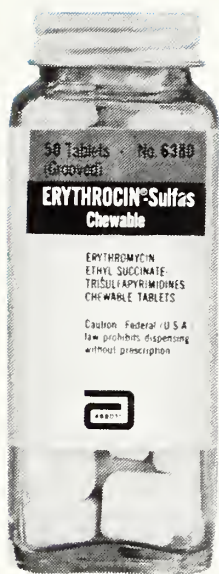
CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL:

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

ERYTHROCIN-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



TVMA Scheduled for Chattanooga

The 15th Annual Assembly of the Tennessee Valley Medical Assembly has been scheduled for Oct. 2-3 at Chattanooga, according to Dr. Frank B. Graham, president. The Memorial Auditorium of Chattanooga will be headquarters for the meeting.

A galaxy of prominent essayists are slated to speak with 10 papers on the Oct. 2 program and eight set for Oct. 3. Four luncheon symposia on diabetes, cancer of the G.I. tract, emergency room procedures, and lymphomas and retroperitoneal tumors, respectively, are scheduled for the two days.

Robins Announces New Allbee-T

Allbee®-T, a high potency, therapeutic formulation of the important B-complex vitamins, including Vitamin B₁₂, with 500 mg of Vitamin C and desiccated liver, will be introduced August 1 by A. H. Robins Company, Richmond-based pharmaceutical manufacturing firm.

Allbee-T will be professionally promoted and may be obtained on prescription or recommendation.

The orange, capsule-shaped, film-coated tablets, monogrammed AHR, will be packaged in bottles of 100 and 500.

DDS Drill Splits Patient, Cool

The dental drill is a threat to the patient's cool. This is the report by a group of Buffalo, N. Y., investigators to the recent International Association of Dental Research meeting at Washington.

Drs. Normal L. Corah and Robert E. Pantera said that they made two sound motion picture films of a dental drill in action. One film was from the patient's viewpoint, while the other depicted the procedure from a detached, third person angle. Volunteers viewing each film demonstrated measurable psychological stress through skin conductance monitors while watching the movies.

The researchers said that the highest degree of stress was among those who gave a history of "high dental anxiety."

Volume VIII
Number 10
October 1967



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
TEMPLE AINSWORTH, M.D.
President
JOSEPH B. ROGERS, M.D.
President-elect
WALTER H. SIMMONS, M.D.
Secretary-Treasurer
WILLIAM E. LOTTERHOS, M.D.
Speaker
JAMES L. ROYALS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

CONTENTS

ORIGINAL PAPERS

- Recent Advances
in Trauma **589** RICHARD J. FIELD, JR., M.D.
- Lupus
Erythematosus **601** VIRGINIA S. TOLBERT, M.D.

SPECIAL ARTICLES

- Radiologic
Seminar LXVI **594** A. WAYNE SULLIVAN, M.D.
- Coronary Heart
Disease: Part V **596** WILLIAM H. ROSENBLATT, M.D.
- The Physician's
Role in Community
Mental Health **604** R. LAYTON MCCURDY, M.D.

EDITORIALS

- Smoking and
Health: Trouble Is
100 mm Long **609** With the Rabbit's Foot Filter
- STP Revisited:
Journal Erratum **615** Still a Bad Trip
- AMA-ERF: A
Positive Force **615** The Dean Says It Best
- India: Too Late
for the Pill **616** Transistors for Vasectomy
- Detroit Doctors:
They Stand Tall **617** Gheto War Service

THIS MONTH

- The President
Speaking **608** The Most Important Dues
- The Literature **625** New Books Reviewed
- Medical
Organization **627** Wilson: AHA Chief
- Meetings **644** Society Circuit

Copyright 1967, Mississippi State Medical Association

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

INFLAMMATION: A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.



NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

October 1967

Dear Doctor:

The big three controlling postgraduate training in surgery have agreed to discontinue the three year residency, known as Type II. Action was initiated by the American Board of Surgery and got quick concurrence from the American College of Surgeons and AMA. No new three year surgical residencies will be approved after 1968, and program is out in 1972.

Type II trainees have higher failure rate in taking American Board as compared with Type I or four year trainees. While the three year programs have been on the decrease, any not qualified by next June will automatically be disapproved, and all must be Type I by 1972.

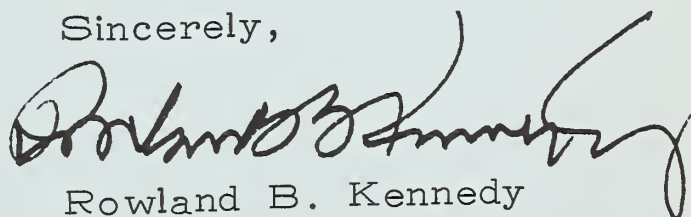
Ten key staff members of the Mississippi State Board of Health who retired in 1967 have a combined service of 238 years. Three physicians, Drs. N. C. Knight, W. R. May, and John A. Milne, all topped the three decade mark with 103 years among them. Longest service honors go to Emma M. Turner, R.N., with 40 years in public health nursing.

A Princeton University theologian says that he foresees a do-it-yourself abortion pill as being only a few years away. Addressing the recent International Conference on Abortion at Washington, Rev. Dr. R. Paul Ramsey said abortion should have nothing to do with law, rather being a wholly personal decision. He said women can take pills monthly and never know whether they have performed self-abortion or not.

Minnesota has become the second state to enact a law for mandatory fluoridation of public water supplies. Implementation deadline is Jan. 1, 1970, but three-fourths of state's population is already drinking fluoridated water. First state to pass measure, Connecticut, had a Jan. 1, 1967, implementation.

The Social Security Administration loudly disclaims that it has hired thousands of new employees to run Medicare. Officials say that as of June 30, only 891 employees staff the Bureau of Health Insurance at Baltimore. Fact of the matter is, however, that SSA has a total of 60,692 employees, and most working in Medicare are in the field.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

Lab Animal Law Works Hardships, Raises Costs

Philadelphia - The recently effective laboratory animal law is raising the cost of medical research and making it difficult for university centers and dealers who sell animals. University of Pennsylvania is being forced to spend \$1 million to remodel animal care facilities to comply with law. Western Reserve University has had to substitute monkeys for cats, and Temple University says quality of research animals has declined because law requires dealers to hold animals for five days before shipping, thereby exposing them to contagion. Some labs are beginning to breed their own research animals.

Violence From Marijuana Use Is Reported

Albany, N.Y. - The New York State Department of Narcotics reports that crimes of violence following use of marijuana are on the increase in the Empire State. Report said that within the year, there have been 27 murders, 12 assaults and batteries, 10 robberies, and 17 other felonious crimes by marijuana users, all while under influence of the drug.

Poverty Program Is Promoting 'Judicare'

Madison, Wis. - The OEO has funded a Judicare program for the 26 northern counties of Wisconsin to provide legal services for the poor, and results are stirring a controversy. In the first year of operation, 2,800 applications were made for Judicare cards which establish eligibility. About 700 cases have been completed under program by 270 Wisconsin attorneys. Main complaint is that Judicare drums up and subsidizes divorce. Two other states, Mississippi and South Dakota, plan Judicare programs through state bar associations.

Three Disciplines Dominate AMA Convention Registration

Chicago - Nearly half of the 12,000 physicians registered at the AMA Atlantic City annual convention last June were surgeons, internists, and general practitioners. Per cent of the three disciplines was about the same for the 1963 meeting, also conducted at Atlantic City. Figures seem to indicate that other specialties prefer their own societies over AMA.

Home Health Agency Services Are Studied

Baltimore - Social Security officials have completed studies of 1,256 approved home health agencies, finding that in addition to the first requirement of skilled nursing services, 72 per cent offer physical therapy; 15 per cent, occupational therapy; 23 per cent, speech therapy; 21 per cent, medical social services; and 35 per cent, home health aide services. About two-thirds of the programs offer two or more services beyond nursing.

This is one of another series of advertisements in daily newspapers throughout the State designed to help encourage individuals and families in Mississippi to upgrade their hospital-surgical-medical benefits to meet today's rising costs. This current ad highlights Blue Cross-Blue Shield's new non-group plan...*which requires no enrollment fee and can be handled entirely by mail.* Other advertisements will follow, emphasizing a *wide choice* of hospital room allowances, *higher* surgical payments...with medical benefits beginning the *first day* of in-hospital patient care. In an effort to inform all Mississippians about this new benefit program, newspaper ads will be supplemented by television and radio coverage.



MISSISSIPPI HOSPITAL & MEDICAL SERVICE
P. O. BOX 1043 / 530 EAST WOODROW WILSON AVENUE
JACKSON, MISSISSIPPI 39205



The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYNTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856

Diarrhea

TROCINATE® 400 MG.

BRAND THIPHENAMIL HCl.

WSMA Gets 749 Planning Grant

The U. S. Public Health Service has awarded the Washington State Medical Association a grant of \$19,835 for a training and orientation project in comprehensive health planning, according to word received here today from the office of Surgeon General William H. Stewart. The notice of the award was received by Dr. Lucius D. Hill, association president.

Two hundred practicing physicians in the state will be invited to participate in the project, which will study individual and community needs and demands for health services and ways and means for providing them.

"We are very pleased to have this opportunity to enter into the planning processes that hopefully will result in our being able to devote a greater share of our country's private and public resources to both private and public health services programs," Dr. Hill said.

Dr. Hill pointed out that physicians have been assisting patients in their health planning for years and have done a very good job of it. But explosions in population, medical research, drug development, population mobility, and organizational techniques require a more comprehensive and community-wide effort than has been necessary in the past.

"We feel confident the interests of individual patients will be served best if the physicians who actually care for them are involved in the planning process. In our opinion, everyone, including the government and other professional health groups and consumers, is determined to lend a hand in this cooperative effort."

The project will be under the direction of Dr. Roland D. Pinkham of Seattle, who is president of the Washington State Medical Education and Research Foundation, an independent group founded by the State Medical Association "to engage in and carry on and carry out scientific research projects in the public interest in the fields of medical science, medical economics, public health, medical sociology and related areas."

The project was approved by the State Department of Health and by the new State Community Affairs and Planning Agency, which has been designated as the state agency responsible for comprehensive health planning under Public Law 89-749. The state agency is planning similar orientation and training sessions for other health professional and occupational groups and for state and local public officials and consumers.

PHS Questions Tests for Hearing Acuity

The effectiveness of many hearing conservation programs in the United States has been questioned by the Public Health Service's National Center for Chronic Disease Control.

Medical authorities at the center believe that the use of inaccurate audiometers to measure hearing ability and detect ear damage or disease is widespread in hearing conservation programs across the country. They are backed by the findings of a three-year PHS evaluation of audiometers recently completed by the University of North Carolina's Audiometric Calibration Center.

In this study, the Calibration Center evaluated the accuracy of 100 audiometers. Not one of the instruments met the study's calibration specifications.

The National Center for Chronic Disease Control is concerned about the medical implications involved. According to Dr. Joseph L. Stewart, Audiology Consultant to the Center's Neurological and Sensory Disease Control Program (N&SDCP), an audiometer that is out of calibration can cause serious errors in large-scale screening programs.

It can, for example, miss the child with a potentially dangerous infection of the middle ear or indicate its possibility in another child, in whom it doesn't exist.

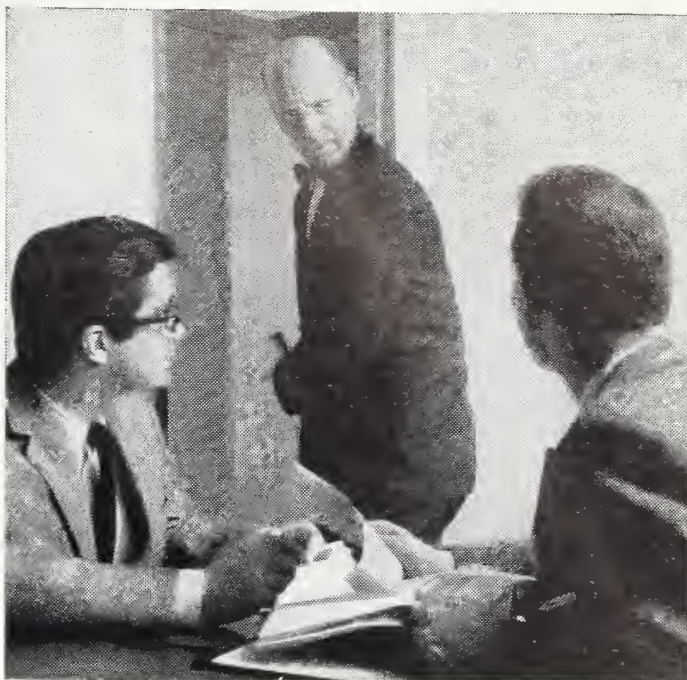
"No hearing conservation program can be effective if its audiometers are not checked for calibration on a regular basis," Dr. Stewart said.

While there is no way to determine the extent or medical impact of past audiometric errors, the Center is taking steps to bring about accurate hearing evaluations in the future.

For the next several months, the Calibration Center and the N&SDCP will be following the 100 audiometers that were tested and calibrated during the three-year study just completed.

The instruments will be examined at three-month intervals to determine how often they need to be recalibrated, why they go out of calibration, and which functions of the instruments give the most trouble.

At the same time, the N&SDCP is negotiating with non-government contractors for the construction of a model audiometer, free of the defects discovered in the study instruments. Among other improvements, and unlike any audiometer now on the market, it will be self-calibrating.



He leaves to make an urgent call But doesn't use the phone at all

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin, and protects
intestinal mucosa.

Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.

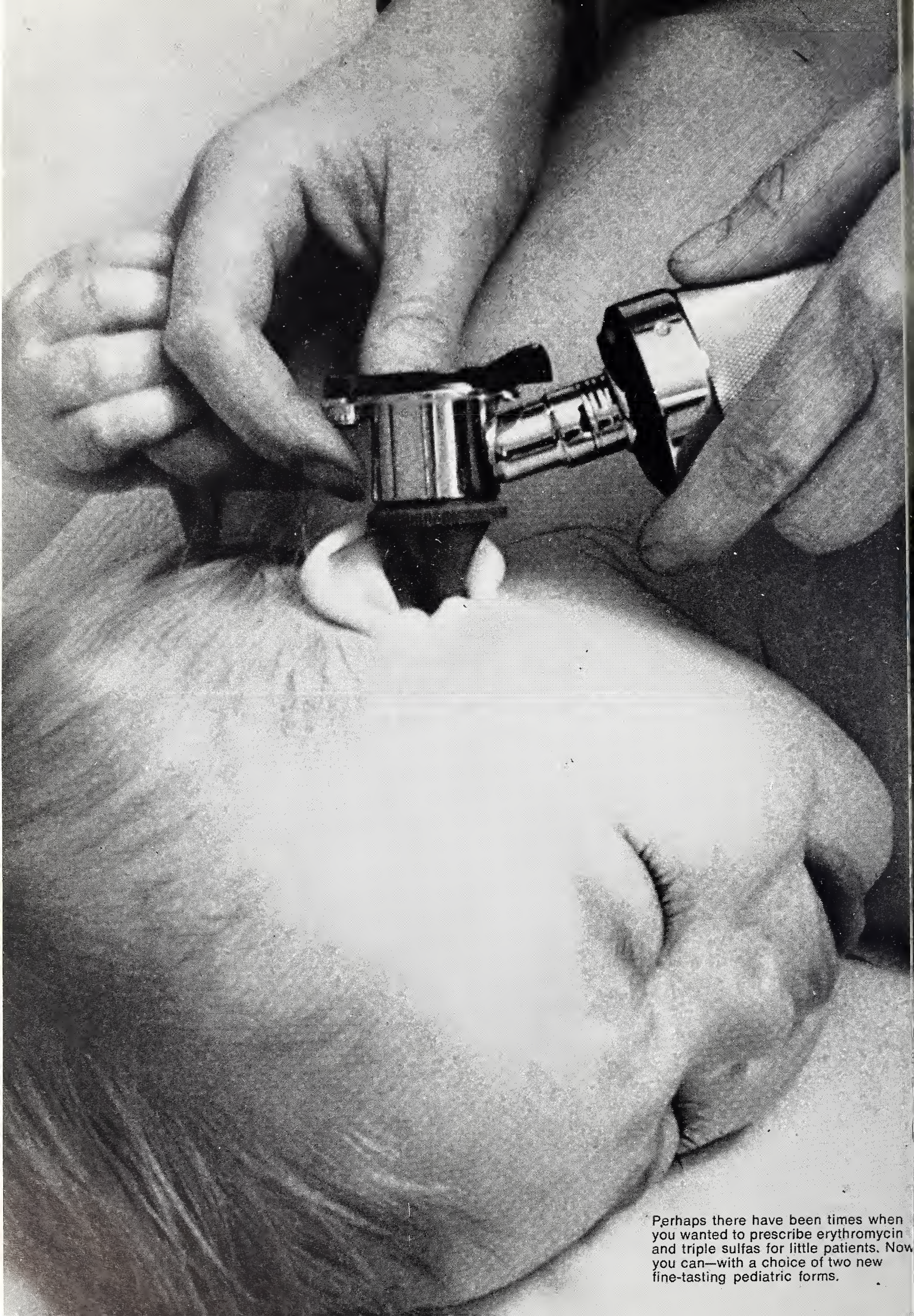


Parepectolin®

Each fluid ounce of creamy white suspension contains:
Paregoric (equivalent) (1.0 dram) 3.7 ml.
Contains opium ($\frac{1}{4}$ grain) 15 mg. per fluid
ounce.
warning: may be habit forming
Pectin ($2\frac{1}{2}$ grains) 162 mg.
Kaolin (specially purified) (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three
times daily.

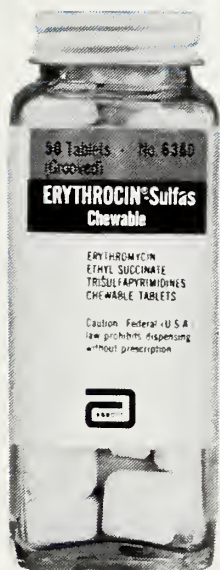


WILLIAM H. RORER, INC.
Fort Washington, Pa.



Perhaps there have been times when you wanted to prescribe erythromycin and triple sulfas for little patients. Now you can—with a choice of two new fine-tasting pediatric forms.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN®-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



AMA Schedules Meet on Emergency Services

"The Community and Emergency Medical Services" will be the theme of a national conference sponsored by the American Medical Association Jan. 18-20, 1968 at the San Francisco Hilton Hotel, San Francisco, Calif.

During the two and one-half day program all aspects of a community's emergency medical services system will be discussed in terms of identification, coordination, and implementation. This system includes: first aid and emergency care, transportation of the ill and injured, emergency communications, and emergency facilities.

Special emphasis will be placed upon the development of Community Councils on Emergency Medical Services and ways and means of financing the community's emergency medical services system. Roles of the U. S. Department of Transportation, Public Health Service, state government and medical organization also will be discussed.

The conference is open to all persons involved or interested in their community's emergency medical care. This includes physicians; allied health personnel; hospital administrators; providers of ambulance services; public safety officials—police, fire and sheriff; government officials—local, county and state; representatives of service organizations; planners; educators; and private citizens. A cross section of the various national leaders of the above groups will be featured on the conference program.

An added highlight will be industrial and organizational exhibits related to the various aspects of the emergency medical services system.

Medical Records Are Automated

An on-line automated master patient record system utilizing Bunker-Ramo cathode ray tube terminals, linked to an IBM 1440 computer, has been installed at the Institute of Living in Hartford, Conn.

The system is now being used to process and store records of admissions, transfers, departure plans, departures, changes in visit status, returns from visits, and changes in doctors' assignments. It also provides a daily hospital census, a bed availability report, patient movement reports, doctors' assignment lists, and other patient reports.



ORIGINAL PAPERS

Recent Advances in Trauma

RICHARD J. FIELD, JR., M.D.

Centreville, Mississippi

AT A RECENT MEETING of the National Academy of Science, trauma was described as "the most neglected epidemic of modern society."¹ It is astounding to realize that trauma is the leading cause of death in the first half of life, and that in 1965, 52 million accidental injuries killed 107,000 people, temporarily disabled over 10 million, and permanently impaired 400,000 American citizens at a cost of approximately \$18 billion.

As physicians concerned with this problem, it behooves us not only to keep ourselves well informed but to take advantage of every opportunity to bring these facts to the public so that they, too, will be aware of the magnitude of trauma in the country.

There have been many advances in the realm of trauma. Two of the most important ones will be discussed. The first is central venous pressure. It is obvious that the single most important aspect of patient care is the maintenance of an optimal blood volume. This is true not only in trauma but in any serious disease. Uncorrected hypovolemia leads to hypotension, which in turn leads to poor tissue perfusion and damage to such vital organs as the renal system and the heart. Contrariwise, overloading of the cardiovascular system by excessive fluid or blood volume replacement may well precipitate heart failure and enhance the development of pulmonary edema.

The majority of physicians, in treating blood volume problems, depend almost entirely upon clinical inspection for changes in the color of the skin, rapidity of heart rate, and the peripheral

blood pressure. However, we are aware of the inaccuracies of inspection in hypovolemia. With moderate hypovolemia, venous dilatation may result in still good venous filling, and the skin may be pink, warm, and dry, especially if the blood volume deficit is due primarily to plasma depletion. The arterial pressure and the pulse may re-

Trauma has been described as "the most neglected epidemic of modern society." It is the leading cause of death in the first half of life. The author discusses two advances in the treatment of trauma, the monitoring of central venous pressure and the hemodynamics of the body when in shock.

main stable during hypovolemia until sudden decompensation takes place.

In chronic pulmonary disease or broncho-pneumonia coexisting with hypovolemia, there may be tachycardia, cyanosis, rales, and wheezing, which are indistinguishable from cardiac failure and which thus may deter the physician from carrying out much needed blood volume replacement. Likewise, the presence of known cardiac disease, even acute myocardial infarction, may be complicated by hypovolemic hypotension. If the blood depletion is obscured, the hypotension may be mistakenly attributed to cardiac disease. If the blood volume deficiency is obvious, as with visible

bleeding, it may be difficult to decide which of the two lesions is responsible for the hypotension.

The other diagnostic methods most frequently used in addition to clinical inspection are serial hemoglobin or hematocrit determination. Both these laboratory procedures are dependent on the principles of dilution and concentration and are of little value in many diverse conditions. Obviously, we have a need for a more convenient and dependable method of estimating blood volume requirements under difficult circumstances. Thus, the observation of Hughes and Magovern regarding the accuracy of the central venous pressure in determining blood volume in seriously ill patients is of most importance to us.

Central venous pressure arises from the arterial pressure as it is transmitted across the capillary bed into the venous reservoir (Figure 1). Central venous pressure is determined by the inter-related effects of the three factors which comprise the physiologic dynamics of the circulations, mainly the pump action of the heart, the blood volume, and the vascular tone.

THREE-ELEMENT SUPPORT

The circulation depends upon the coordinated support of these three elements. The central venous pressure varies directly with the vascular tone and the blood volume and inversely with the pump action of the heart. There is no satisfactory way to measure all three of these independently; however, the central venous pressure monitoring provides the bedside clinician with a practical compromise, enabling him to observe the relationship between circulating blood volume, the capacity of the cardiovascular system, and the pump

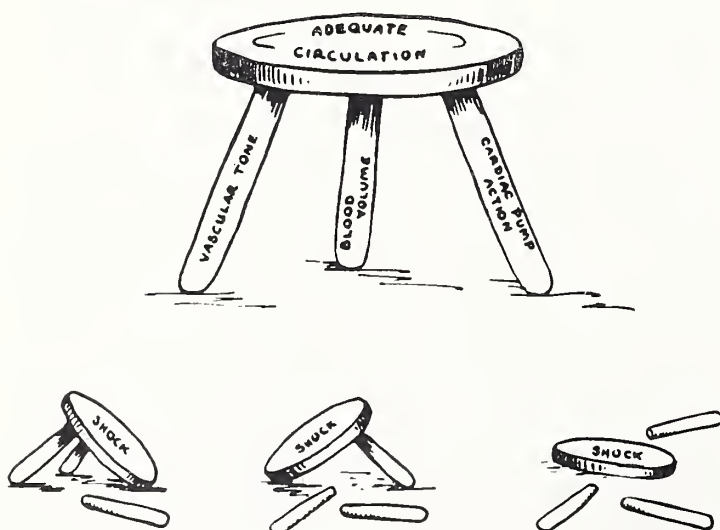


Figure 1

action of the heart. Any one of these three factors may be at fault, or all three, or any two (Figure 2).

Obviously, one cannot depend upon the central venous pressure entirely and must correlate it with the condition of the patient, his urinary output, his peripheral blood pressure, etc. If the central venous pressure is evaluated in its proper per-

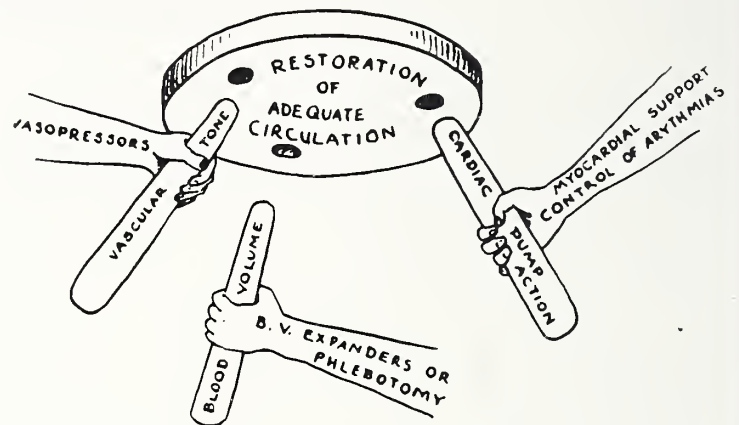


Figure 2

spective, it can be a most valuable tool. For example, if the central venous pressure is between 0 and 6 cm. with hypotension, it suggests that the patient is hypovolemic, which is an indication for whole blood or fluid replacement. If the central venous pressure is between 15 and 20 cm., it suggests that the problem is predominantly due to cardiac failure, and efforts must be made to stimulate the action of the heart pump using cardiac glycosides and correction of acidosis. If the central venous pressure is from 10 to 13 cm. with hypotension, it indicates that a cautious trial with blood or blood volume expanders may well be attempted.

SAFEGUARD AGAINST EDEMA

Central venous pressure monitoring has virtually eliminated the occurrence of pulmonary edema from inadvertent blood volume and fluid overloading. All of us have been confronted with the difficult problem of how much fluid to administer and over what period of time to do so. By continued serial monitoring, this problem can be handled with much more confidence.

The indications for central venous pressure monitoring are:

(1) during acute circulatory failure of obscure origin which has failed to respond to initial treatment. (This is a most valuable method to determine immediately whether one is dealing with hyper or hypovolemic shock.)

(2) during massive blood volume or fluid replacement, even though the hypovolemia is obvious, the central venous pressure gives assurance to us to restore blood volume aggressively

(3) during periods when blood volume or cardiac dynamics may become unstable, such as in severe burns or during major surgical procedures, particularly in elderly arteriosclerotic patients who tolerate hypotension poorly

(4) during oliguria or anuria with an apparently adequate blood pressure. (All of us have treated patients in which we are not certain whether the oliguria is due to dehydration or hypovolemia, or if a true renal shutdown exists. If the latter is the case, it is important to avoid over-hydration.)

(5) during the combined defects of blood volume, cardiac action, and vascular tone. (Here the central venous pressure monitoring is an essential guide for one to integrate the optimal blood volume maintenance with a simultaneous

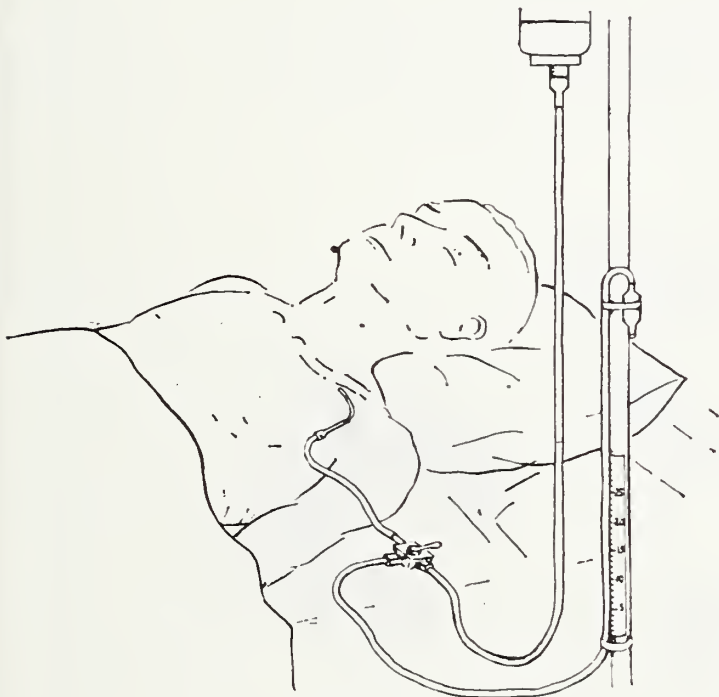


Figure 3

support of the cardiac pump and the vascular tone.)

As to technique (Figure 3), the central venous pressure manometer is done as a bedside procedure, cannulating the subclavian vein or, preferably, the anterior jugular vein using a number 14 plastic catheter. In our experience, the anterior jugular vein is safer, as it eliminates the possibility of a pneumothorax. Disposable central venous pressure manometers which are accurate are now available and in addition to securing the central

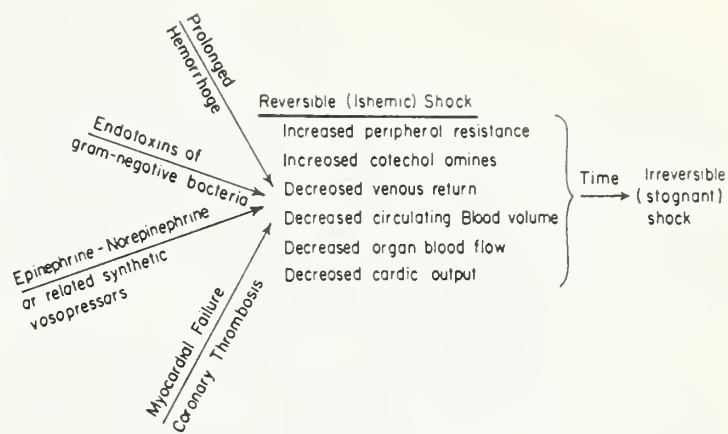


Figure 4

venous pressure measurement, the physician is also able to give intravenous fluid or blood without difficulty. Thus, central venous pressure monitoring is a relatively simple method and an accurate one when combined with the clinical appearance of the patient. It can lead us to treat volumetric problems with more confidence.

A second recent, although not new, contribution to trauma comes from the University of Minnesota department of surgery under the direction of Dr. Richard C. Lillehei.² Previous to their excellent experimental work on shock, most physicians vaguely remembered that shock was due to massive vascular dilatation throughout the body with some type of selective ischemia so that the brain and heart received an adequate blood supply at the expense of the liver, kidneys, and intestinal system. We also remembered rather hazily that there were different types of shock, such as neurogenic, cardiogenic, hemorrhagic.

LILLEHEI DOCTRINE

Dr. Lillehei has rather conclusively proven that all of the types of shock (Figure 4) produced the same essential effect in the hemodynamics of the body in that there is an increased peripheral resistance, increased catecholamines, decreased venous return, decreased circulating blood volume, decreased organ and blood flow, and decreased cardiac output. With time, this ischemic, or reversible type, shock becomes stagnant shock, which is the irreversible type. All are due to the same basic problem. This is well depicted in Figure 5 from Dr. Lillehei's original article.

The reversible ischemia type shock produces a decreased blood volume and an increase in resistance of vessels on either side of the capillary bed. This produces a smaller vascular space which more adequately fits the diminishing blood volume. As a result of the vasoconstriction, hydro-

static pressure within the capillaries falls, allowing plasmocolloid osmotic pressure to draw additional fluid into the circulation to aid in restoration of the blood volume. If the underlying cause of the shock is corrected within two to four hours, no further difficulty is experienced.

IRREVERSIBLE SHOCK

However, if it is not corrected (Figure 6) the stagnant, anoxic, or irreversible type shock occurs, in which there is a loss in tone of the arteriolar vessels, while the venous vessels are still able to retain their tone. Apparently, the venous systems are more resistant to the changes in the PH than the arteriolar ones, and when this occurs, blood comes into the capillary bed in increasing amounts and is unable to leave due to the venous resistance. This increasing stagnation of blood increases the hydrostatic pressure in the capillary bed and tends to further deplete an already diminished blood volume, driving additional fluid out of the capillaries.

Restoration of blood volume at this time may

not restore the circulation to normal unless something is done to restore the normal dynamics in the micro-circulation of the capillary beds. This concept of shock is a relatively new one, and for the first time allows us to base our treatment upon sound hemodynamic principles. Of course the first, and by far the most important, therapy in shock is the rapid and adequate restoration of an effective circulating blood volume which can be controlled by the use of central venous pressure.

If, after the use of blood volume expanders and whole blood, the patient remains hypotensive, one may consider the use of the adrenergic blocking agents, such as Dibenzylamine (Phenoxybenzamine), hydrocortisone, and chlorpromazines. The method in which the adrenergic blocking agents protect against the development of shock is still controversial. However, it is known that they produce an arteriolar relaxation with a decrease in venous tone. In doing so there is a reduction in the capillary hydrostatic pressure, which restores the hemodynamics to a more normal circumstance. By doing this, the cardiac work load is reduced, and the peripheral resistance is reduced. This inhibition of the sympathetic nervous system has been most effective in prolonging the life of

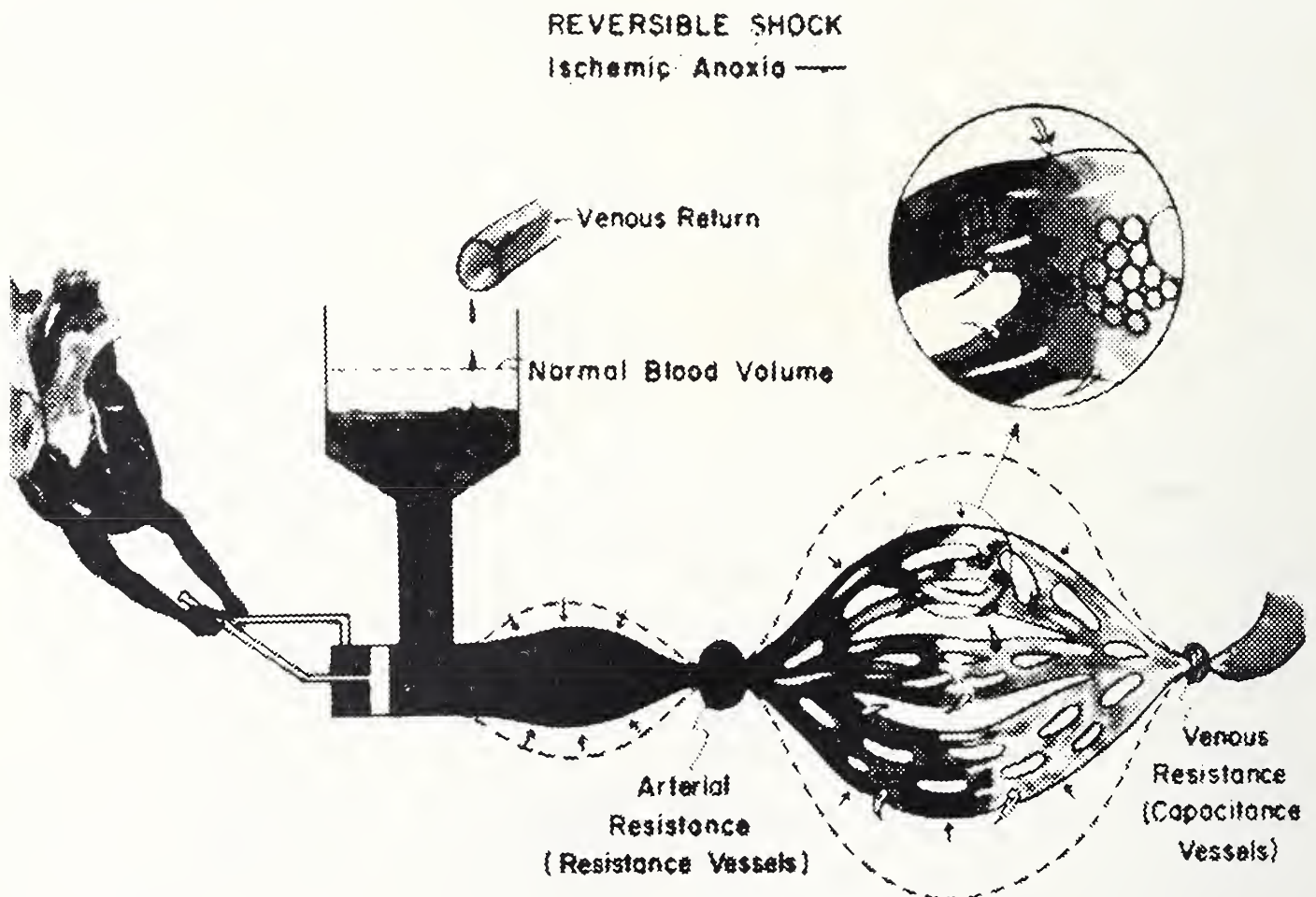


Figure 5

IRREVERSIBLE SHOCK

Stagnant Anoxia —

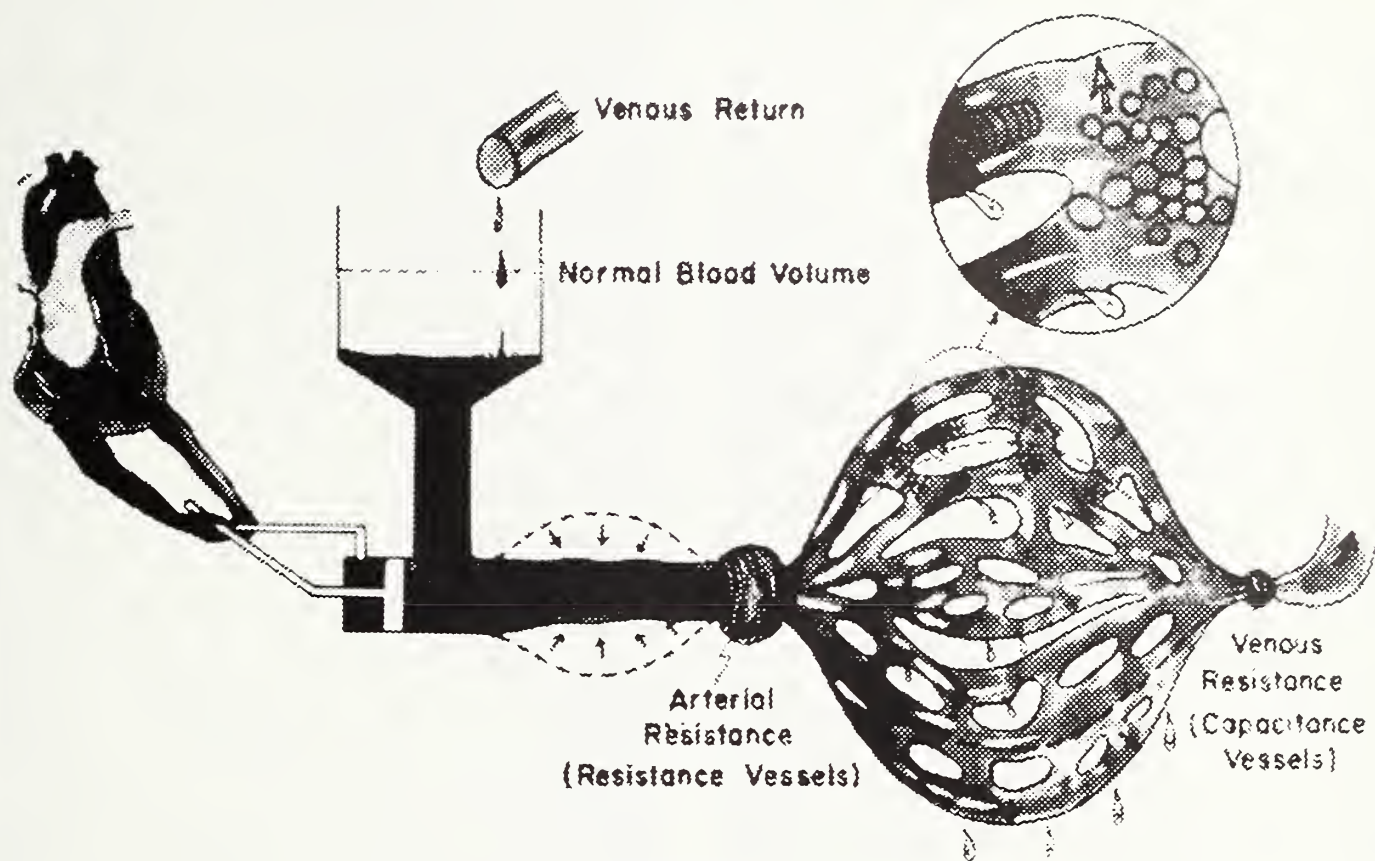


Figure 6

animals in research laboratories and has been successfully transferred to clinical use.

The action of hydrocortisone is particularly unknown, but it has been found to be most effective in the treatment of all types of shock in large intravenous doses. It has been more popular than Dibenzylamine because its actions are not as rapid and the changes in the capillary bed are not so sudden so the fluid volume changes more slowly. Thus, the use of the adrenergic blocking agents, combined with the blood volume expanders and blood, have been a major step in treating all types of shock and should be a valuable addition to the armamentarium of the trauma surgeon.

This brief discussion of central venous pressure and the new concept of shock will, it is hoped, stimulate interest in their usage and improve the care of the seriously ill patient. ★★★

Field Clinic (39631)

REFERENCES

1. Committee on Trauma and Committee on Shock, Division of Medical Sciences, National Academy of Sciences, National Research Council: *Accidental Death and Disability: The Neglected Disease of Modern Society*, Sept., 1966, pp. 5-38.
2. Lillehei, R. C.; Longerbeam, J. K.; Bloch, J. H., and Manax, W. G.: *The Nature of Irreversible Shock: Experimental and Clinical Observations*, *Ann. Surg.* 160:682-710 (Oct.) 1964.
3. Bloch, J. H.; Pierce, C. H., and Lillehei, R. C.: *Adrenergic Blocking Agents in the Treatment of Shock*, *Ann. Rev. Med.*, 17:483-508, 1966.
4. Borow, M.; Aquilizar, L.; Krausz, A., and Stefanides, A.: *The Use of Central Venous Pressure as an Accurate Guide for Body Fluid Replacement*, *Surg. Gynec. & Obst.* 120:545-552 (March) 1965.
5. Wilson, J. N.; Grow, J. P.; Demong, C. V.; Prevedel, A. E., and Owens, J. C.: *Central Venous Pressure in Optimal Blood Volume Maintenance*, *A.M.A. Arch. Surg.* 85:563-578 (Oct.) 1962.
6. Hughes, R. E. and Magodern, G. J.: *The Relationship Between Right Atrial Pressure and Blood Volume*, *A.M.A. Arch. Surg.* 79:238, 1959.

Radiologic Seminar LXVI: Gallstone Ileus

A. WAYNE SULLIVAN, M.D.
Meridian, Mississippi

GALLSTONE ILEUS is a rare condition accounting for about 2 per cent of all types of mechanical small bowel obstruction. It occurs when a stone, usually large in size, migrates by pressure erosion from the gallbladder to the adjacent gastrointestinal tract.

It may then pass down the small bowel causing intermittent to complete small bowel obstruction. Due to the relatively small caliber of the lower ileum, complete obstruction most often is observed in this region. Obstruction may also occur in the left colon in the descending or sigmoid segments, particularly in areas narrowed by scarring from diverticulitis or by carcinoma.

The clinical picture is most commonly seen in elderly women presenting signs and symptoms of incomplete to progressively more complete small bowel obstruction. One-half of these patients do not have a previous history of gallbladder disease.

Three important radiographic signs include: (1) evidence of obvious mechanical obstruction, (2) identification of a stone in the bowel, (3) gas outlining the biliary tree.

Sequential films may show the stone in question to shift in position before finally impacting and failing to move further with complete obstruction resulting. Occasionally, barium studies are used which may accurately outline the point of obstruction. In instances where the stone is not calcified enough to be seen on the plain film, it may be outlined by its imprint on the barium column. Also, barium may outline the fistulous tract between the gallbladder and the intestine.

The accompanying x-ray studies are those of a 69-year-old obese white female seen in the hospital complaining of nausea, vomiting and abdominal pain of 24-hours' duration. There was no previous knowledge or history of gallbladder dis-

ease. Abdominal films showed the presence of a large, roughly oval calcification in the lower abdomen with distended loops of small bowel and air fluid levels being evident when the patient assumed the erect position. There was a faint outline of the biliary tree by gas (Figures 1 and 2).

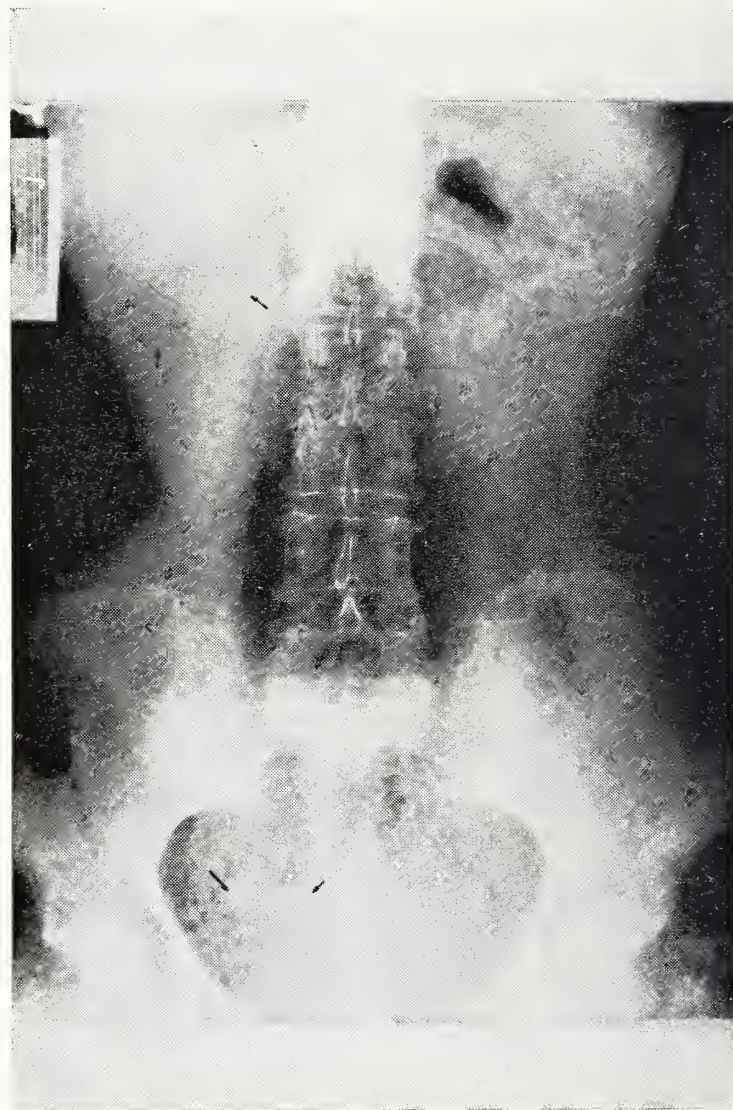


Figure 1. Supine AP views of the abdomen. Upper set of arrows in right upper quadrant indicates gas in biliary tree. Lower set of arrows points to large calcified gallstone in the lower small bowel.

Sponsored by the Mississippi Radiological Society.



Figure 2. Upright AP view of the abdomen demonstrates air fluid levels associated with small bowel obstruction and again the gallstone is pointed out.



Figure 3. GI series following surgical removal of the gallstone from the ileum revealing fistulous connection between bowel and biliary tract.

A film made during a GI series following surgical removal of the stone from the lower ileum shows that barium outlines the fistulous tract connecting the bowel and gallbladder (Figure 3). ★★★

1204 21st Ave. (39301)

REFERENCES

1. Fiegel, Leo S., and Fiegel, Stephen J.: Lesions of the Large Intestine Producing Acute Symptoms, *Rad. Clin. N. Amer.* 2:33-54, 1964.
2. Frimann-Dahl, J.: *Roentgen Examination in Acute Abdominal Disease*, ed. 2, Springfield, Ill., Charles C Thomas, 1960.
3. Bridenbaugh, R. B.; Bridenbaugh, J. H., and Berg, H. M.: Gallstone Ileus, *Amer. J. Roentgenol.* 77:684-689, 1957.
4. Carlson, Evert; Gates, C. Y., and Novacovich, George: Spontaneous Fistulas Between the Gallbladder and Gastrointestinal Tract, *Surg. Gynec. & Obst.* 101:321-330, 1955.

SMALL CREDIT RISK

A midget with the circus in the Prague escaped across the border into Austria to seek refuge from the communists. Unable to speak other than his native tongue, he secured a note to convey his request for sanctuary:

"Can you caché a small Czech?"

Coronary Heart Disease: Part V

WILLIAM H. ROSENBLATT, M.D.
Jackson, Mississippi

THERE ARE FIVE MAJOR complications of acute myocardial infarction: (1) congestive heart failure, (2) cardiogenic shock, (3) arrhythmias, (4) thromboembolism, and (5) rupture of the ventricle.

Regarding thromboembolism, there is a propensity for blood to clot on the endocardial surface of the injured area of the heart muscle. These clots may remain as mural thrombi or may be thrown off into the circulation, blocking peripheral arteries. They may be thrown off and block arteries to the abdominal viscera producing mesenteric arterial embolization with infarction of the bowel or to the extremities or brain.

Pulmonary embolization may occur in the case of a septal myocardial infarction with mural thrombus forming on the endocardial surface of the right ventricle or the endocardial surface of the septum facing the right ventricular cavity. While these are potential sources of embolization, the more frequent sources of embolization in acute myocardial infarction are from venous thromboses in the deep veins of the lower extremities producing pulmonary embolization and pulmonary infarction.

Thromboembolism in acute myocardial infarction only occurs in about 7 per cent of cases. Anticoagulants may be effective in preventing this particular complication. At the same time, weighing the potential dangers of anticoagulant therapy, it is found that roughly 20 per cent of patients who receive anticoagulants may have hemorrhagic complications. Superimposed on acute myocardial infarction, this is most dangerous. In the prevention of thromboembolism from mural thrombi, the feeling today is that anticoagulants do little, if anything. The only possible benefit obtained from

anticoagulant therapy would be in the presence of phlebothrombosis of the deep veins of the lower extremities. The overall mortality rate for acute myocardial infarction is in the neighborhood of 20 to 30 per cent in the 21 day hospital period, and roughly 50 per cent of the deaths occur in the first 48 to 72 hours. So, it is evident that only

In the management of the healing and recovery stage following acute myocardial infarction, five major complications must be considered. These include congestive heart failure, cardiogenic shock, arrhythmias, thromboembolism and rupture of the ventricle. In this paper the author discusses thromboembolism and rupture of the ventricle.

an extremely small percentage of people will incur thromboembolism.

I am not suggesting that you do not anticoagulate patients with acute myocardial infarction, but I would like to remind you again that this is not a harmless treatment, and so far as the benefits to be derived, you can only hope to prevent perhaps 7 per cent of these people from developing thromboembolism. I still anticoagulate patients with acute myocardial infarction, but now a little more cautiously than previously.

If an individual is a so-called poor risk patient or one who (1) has intractable pain, (2) is in shock, (3) is in congestive heart failure, (4) has had a previous myocardial infarction, or (5) is a diabetic, I use anticoagulants only hoping to protect him from the development of phlebothrombosis. A good risk patient is the individual who presents with mild pain and a mild rise in SGOT, has no more pain after the initial insult, has a stable blood pressure, has no signs of congestive

Adapted from a postgraduate symposium conducted by the author at the University Medical Center, Jackson.

heart failure, has no previous history of myocardial infarction, and is not diabetic. In such cases there is really no need for anticoagulant therapy. We know that anticoagulants will not affect the formation of a thrombus in an artery; they will not prevent the extension of a thrombus in a coronary artery, and they will not affect mural thrombus formation.

VENTRICULAR BLOWOUT

Rupture of the ventricle is a blowout of the ventricle secondary to acute myocardial infarction. It occurs because of the weakening of the infarcted area of the myocardium. When this develops, the pericardial sac immediately fills with blood and tamponade results; death occurs in a matter of minutes. This complication of acute myocardial infarction usually does not occur in the first 24 to 72 hours, but develops in the 10 to 14 day period following the acute infarction. Treatment, of course, is to no avail; there is no treatment for ventricular rupture. Fortunately, this is an exceedingly rare complication.

In the presence of a septal myocardial infarction, the septum can perforate and in this complication, one will find the same time interval applies as for rupture of the ventricle. With septal perforation there is a dramatic change in the physical findings. A loud, harsh, grating systolic murmur appears to the left of the sternum and sudden right ventricular strain and possibly right ventricular failure is apt to occur. Interventricular septal rupture is not universally fatal. The patient may be tided over, and eventually, if all goes well, can be subjected to surgical repair of the septal defect.

We, at times, can be so carried away by the seriousness of acute myocardial infarction during the initial 48 to 72 hour period, concerning ourselves with arrhythmias, shock and congestive heart failure, that we may lose sight of the patient as a whole and what he really wants to know about his future. We will go into this shortly. We all realize that the average length of time for a myocardial infarction to heal is roughly three weeks, and the management of the infarction during the period following the acute episode amounts to careful and watchful waiting while the area of infarction heals.

These patients are generally kept at bedrest to reduce the work load of the heart as much as possible. They are allowed to feed themselves, shave in bed, and are allowed the use of a bedside commode. Actually, I allow the use of the bedside commode facility within a matter of 48 hours or 72 hours following infarction provided everything

is stabilized, and there is no shock, no persistent pain and no signs of congestive heart failure. As we know, bowel movements become extremely important to these patients. Once they are convinced that they can handle this satisfactorily, they are quite cheerful. We certainly do not recommend the use of bedpans anymore, not only because of the indignities the individual is subjected to, but because the stress and strain involved could easily produce a Valsalva maneuver from the sudden increase in intrathoracic pressure during straining followed by release of this pressure, and sudden influx of venous return to the right side of the heart. This produces an increased work load on the right and left sides of the heart with the possible production of acute congestive heart failure, or the development of fatal arrhythmias, or pitching off of mural thrombi into the circulation. The bedside commode should, of course, be placed right at the bedside, and if the patient has a high-low position hospital bed, it should be lowered to the level of the bedside commode, allowing the patient to slip off to the chair with a minimum of effort.

So far as the so-called "chair-treatment" of acute myocardial infarction is concerned, I think this is somewhat unfortunate because chair rest means a variety of things to a variety of doctors. Actually, I believe that when this treatment was initially suggested, it was really with the idea that the individual was to be helped into the chair, the chair being at the bedside; with no undue effort on the part of the patient. By placing the individual in the sitting position with the legs elevated on a horizontal plane, the work load of the heart is diminished even more than with bedrest. There is much abuse, however, associated with this practice, and it would probably be best to forget it.

STRICT BEDREST

Treat the patient as you have always done in the past with two or three weeks of strict bedrest. The patient may be allowed to move about in bed to a certain extent and cranked up to the sitting position, but remember that it takes two to three weeks for the necrotic myocardium to heal. If one does not take these precautions, he runs the chance of allowing ventricular aneurysm to form. With ventricular aneurysm, there is an additional work load placed on the left ventricle, the heart pumping blood out through the aorta and also into the aneurysmal sac; this can precipitate congestive heart failure of the intractable type.

After the patient has been allowed to return home, strict bedrest is not necessary. However, he is advised to avoid stair climbing or doing work

CORONARY DISEASE / Rosenblatt

around the house. Ordinarily these individuals are kept at a restricted activity level for six to eight weeks, or for two months after return from the hospital. They are allowed to take meals at the table, sit out in their yards, and take short auto rides, providing someone else is driving. After this two month restriction period, the patients can embark upon a planned program of physical activity in hopes of increasing collateral circulation in the myocardium.

Walking is probably the simplest form of exercise. These folks are advised to walk on level ground, starting off with one block in the morning and one in the evening, each day increasing the distance to where they walk from one to two miles once or twice daily. Some patients can, of course, do more than this, especially those recovering from small infarctions; others will not be able to walk more than two or three blocks because of angina pectoris following the infarction.

As far as return to work is concerned, this is somewhat of a problem. Many patients with acute myocardial infarction have sedentary jobs, office work or managerial work, and can control the number of hours worked and the amount of exertion involved, and they can start out working half time, perhaps 8 a.m. until noon, relaxing the rest of the day. Such patients are allowed to do this for about one month, and then permitted to return to a full-time activity, with the advice that they come home for lunch and rest for about one hour.

It is not at all uncommon, however, to find manual laborers with acute myocardial infarction, and this is in contradiction to what one reads—that active people are not likely to develop myocardial infarction, and that sedentary people are more prone to develop acute myocardial infarctions. When one has a patient who has been a manual laborer all of his life, perhaps with scant education, a real problem arises.

WORKMEN'S COMPENSATION

If an individual has a heart attack while he is on a job, even though he may be sitting down eating his lunch, someone will try to get workman's-compensation benefits for him. Formerly, in this state, if a man had an acute myocardial infarction on the job and physicians stated that it was probably aggravated by working, the patient received 100 per cent compensation. Now, under the new law of apportionment, if a physician states that probably 50 per cent was related to pre-existing

coronary artery disease, and 50 per cent due to the work he was doing, then the individual might get 50 per cent compensation.

At any rate, telling a manual laborer that he cannot work at all is extremely difficult—even telling him that he must come home for lunch is not practical. There is no answer to this problem short of having the patient apply for Social Security disability benefits or become rehabilitated to some sedentary or less strenuous occupation. By far, the majority of individuals who survive acute myocardial infarctions can resume a productive life.

POSTINFARCTION THREATS

There are two major threats to individuals who have had an acute myocardial infarction. Number one is subsequent recurrent infarction, and number two, congestive heart failure. Presently there is no definite way to protect against these problems, but there are certain things that we can recommend. We attempt to maintain normal body weight or at least control obesity. If the patient has high blood pressure, he should be properly treated, although it has been shown that even though blood pressure is maintained at normotensive levels, the atherosclerotic process continues. Regular and sensible exercise should be advised. Golfing and swimming are good exercises provided the individual is taught not to overdo. Walking, again, is excellent exercise. It should be suggested that the patient quit smoking, though these folks usually won't.

In the past, almost all patients with acute myocardial infarction who did not have peptic ulcer or very high blood pressure, were placed on long-term anticoagulants. I believe that most of us today feel that long-term anticoagulant therapy in myocardial infarction patients in no way alters the long-term outlook. Our group has been following roughly 800 myocardial infarction patients for over a year. The mortality rate at the end of one year has been no different for the patients who received anticoagulants on a long-term basis than for the group who received no anticoagulants. There is a difference of opinion on this matter, however; but I have swung completely away from the routine use of long-term anticoagulants in myocardial infarction patients. If all patients with acute myocardial infarction are considered, regardless of age, the available statistics suggest that 50 per cent will survive five years; 25 per cent will be alive at the end of 10 years. These rates may be deceptive for the younger patient where longevity may be increased because of age at time of onset.

QUESTIONS AND ANSWERS

Dr. Paul E. Goode: "One thing disturbs me. I get the idea from what you say that medical science has not advanced in the treatment of myocardial infarction in the last 30 to 35 years except in doctor education."

Answer: "No. I think there have been tremendous advances. However, the advances that have been made are those made recently, especially in the realm of intensive coronary care units where arrhythmias are picked up early."

Dr. Goode: "Do you routinely digitalize? Is there anything against it?"

Answer: "No. There is not a thing against it from a physiologic standpoint. The only danger that would be staring you in the face is the possibility of producing digitalis intoxication in a myocardium that is already irritable. Let's say that you gave a little too much digitalis, and the patient started firing off premature ventricular contractions. There might be a problem of ventricular tachycardia or fibrillation that might not have occurred without the administration of digitalis."

Dr. Goode: "Wouldn't this be about your best preventive, though, as far as worrying about cardiogenic shock?"

Answer: "Here we have to separate primary arrhythmias from secondary cardiac arrhythmias. We talk about primary arrhythmias producing shock. This is where the ectopic foci arise in the ventricles, and the individual goes into shock. Naturally, the only thing that is going to correct this would be the abolition of the ectopic foci by antiarrhythmics or DC countershock."

"Secondary cardiac arrhythmias are secondary to shock itself and are poorly responsive to any treatment. I think digitalization might be worthwhile in cardiogenic shock where there is a narrow pulse pressure and neck vein distention. In such cases there is little to lose because of the exceedingly high mortality rate associated with this anyway. As indicated previously, one of the most important recent advances in the treatment of patients with cardiogenic shock is the correction of the acidosis with sodium bicarbonate."

ROLE OF PRESSOR AMINES

Dr. Goode: "What part does Aramine play in shock?"

Answer: "We don't have any really effective method of treating shock, but we think that the use of pressor amines has helped in pulling some of these patients out of cardiogenic shock. I usually start off with a preparation like Aramine, put-

ting 10 cc. in 500 cc. of 5 per cent glucose in water, then trying to maintain the blood pressure at a satisfactory level, 110 or 120 systolic. If Aramine is ineffective, you can switch over to Levophed, adding three or four ampules of Regitine to the drip hoping that this latter agent will produce renal vascular dilation and also help reduce the chance of tissue-slough from Levophed infiltration. It is, however, the rare patient that survives profound cardiogenic shock. You will recall that the mortality rate in cardiogenic shock, if not produced by primary cardiac arrhythmias, is close to 100 per cent in spite of treatment."

NO SATISFACTORY TREATMENT

Dr. Goode: "Is part of that shock due to lack of venous return to the heart which would be made worse by Levophed?"

Answer: "In those patients with obvious elevated venous pressure with the neck veins strutted and a narrow pulse pressure, I think the best thing we can offer would be rapid digitalization. This brings up another question—whether to give vasodilators. Frankly, I have not done this, and cannot see giving a preparation which we know will lower the blood pressure in someone in whom we cannot even obtain a blood pressure to start with. We simply do not have a satisfactory treatment for cardiogenic shock as yet."

Dr. Benjamin F. Banahan, Jr.: "Aren't there some advocates of giving small transfusions to patients in cardiogenic shock?"

Answer: "Years ago there were advocates of giving direct intra-arterial whole blood transfusions, but this treatment proved to be ineffective."

Dr. Joseph C. McGehee: "When talking about shock associated with an acute coronary, I believe that you are assuming that the damage to the heart is the main reason for shock. If you have enough heart damage, it doesn't make any difference what you do, the patient is going to die. What are the chances of living on to a ripe old age?"

Answer: "If these people are tided over the initial severe stage of myocardial infarction and shock, then we are still faced with the 50 per cent mortality rate in the first five years, and the 25 per cent mortality rate in the first 10 years."

Dr. McGehee: "What is the state of the blood in the internal organs during the shock period? Does the blood pool there?"

Answer: "It surely does. This is one reason for the use of anticoagulants."

Dr. Banahan: "I get the impression that you don't ever recommend that a hard laborer return

CORONARY DISEASE / Rosenblatt

to work after a myocardial infarction."

Answer: "I have allowed this in the past but not recently. While such a patient could very well have a recurrent attack at home or in his sleep, if he has it while on the job, you've got Workman's Compensation with which to contend."

Dr. Goode: "I have many times witnessed the individual who during the four week recovery period goes into a deep depression."

Answer: "This is a frequent reaction. It is not

at all uncommon to find that these people get terribly depressed; cry and 'fly off the handle' following the acute attack. These folks need mild sedation or tranquilization, or psychiatric help."

Dr. McGehee: "Don't you imagine that these people are seeking an escape from reality?"

Answer: "That may play a part. These folks know that there is something seriously wrong with them, and it is especially noticeable in the younger patients who do not know what to expect with respect to their future." ★★★

1151 N. State St. (39201)

BYE, BYE, BIRDIE!

Comes now the golf nut story to top the one about the player who watched his wife's funeral cortege pass the country club. It seems that a particularly dedicated golfer was on the first tee, right in the middle of a backswing, when a beautiful girl in a bridal gown and wedding veil rushes up crying, "John! John!"

The golfer looked up with disgust and exasperation and growled: "I told you a dozen times, Virginia, only if it rains."

Lupus Erythematosus

VIRGINIA S. TOLBERT, M.D.

Ruleville, Mississippi

LUPUS ERYTHEMATOSUS is a disease that should be considered more often by the general practitioner when signs and symptoms do not readily yield an exact diagnosis. Lupus may have either local or general manifestations. Physicians are all conscious of the typical butterfly lesion of discoid lupus representing the chronic cutaneous form but may forget that discoid LE can effect any area, even the mouth, ears and scalp.

The differential diagnoses may include psoriasis, seborrheic dermatitis, tinea circinata, sarcoid, syphilis, and drug eruption. If the diagnosis is doubtful, a biopsy is indicated. Therapy for the cutaneous form of lupus includes avoidance of sunlight and the use of systemic antimalarials, as well as various topical measures.

Discoid lupus is thought to convert to the systemic form in from 2 to 10 per cent or more of cases. Systemic lupus erythematosus is one of the group of so called "connective tissue diseases" of unknown etiology. It is far more frequent in women of childbearing age, but is found in both sexes of all ages. Many reports show a familial incidence. Since SLE is often seen following the use of drugs, especially the sulfonamides and hydralazine, it is believed by some workers that these are precipitants. There is thought to be a preclinical state for SLE which is precipitated into the active disease by factors such as drugs and infections.

One study in the *Archives of Internal Medicine* attempts to determine the importance of prior intensive drug therapy in the development of apparent SLE.¹ They used as criteria for the diagnosis of SLE: (1) the involvement of at least three organ systems, (2) laboratory confirmation (LE cells or typical spleen histology or typical kidney histology), and (3) exclusion of other disease.

Read before the 87th Semi-Annual Meeting, Delta Medical Society, Drew, April 12, 1967.

Case histories of the patients reported in this study were carefully examined for therapy prior to the development of SLE. Drugs administered included anticonvulsants, antihypertensives, penicillin and a great variety of other therapeutic agents. A more detailed study was made of 34 cases previously treated for hypertension, tuberculosis, or convulsions. In 19 of these patients, treatment for the antecedent disease was discontinued after diagnosing SLE. There was prompt

In April 1955, just before her 16th birthday, the patient was noted to have a facial rash. This soon became typical discoid lupus erythematosus and six years later developed into acute disseminated lupus. Now, 12 years later, the patient is apparently in mild remission. The author discusses this case in detail and reviews the literature on lupus erythematosus.

remission of signs and symptoms of SLE in 18 of these patients with remission continuing for periods up to four years. All of these cases were given steroids, but in 10 of the 18, this was eventually discontinued. Of the 15 other patients thoroughly checked, drug therapy as given prior to SLE was not stopped. Only six of these had remission of signs and symptoms of SLE, while the other nine became progressively worse.

Lee and his workers feel that a small portion of the population, slightly greater than 1 per cent, is genetically susceptible to SLE.¹ Development of the syndrome requires the action of environmental factors. A few patients may require such a small amount of inducing agents that they seem to develop the disease spontaneously. Most susceptible persons run little risk of developing the disease and seem to require extraordinary environmental stimuli such as long-term drug administration. It

is felt that with careful histories it may be possible to recognize many more "activators" in SLE. Obviously this is of extreme importance in therapy since removal of the activators gave prompt remission in several closely followed cases.

It is felt this disease may be a disorder of immunity, with some autoimmune process taking part. Other theories as to etiology include that of a cross reaction between antibodies. No convincing evidence of viral etiology has been demonstrated. Whether or not auto-immunity is the sole cause of SLE, it is proven that auto antibodies exist in the serum of patients with SLE, and this gives the most valuable diagnostic test. The LE cell is found at one time or another in up to 93 per cent of patients with systemic lupus.

SLE has been called a "grand imitator" in medicine, and it may begin in many ways. There may be an acute onset with fever, arthralgia, and acute renal lesions. With an insidious onset, there may be 10 or 20 years before SLE becomes obvious.

DIAGNOSTIC SIGNS

The most common findings of SLE are:

- (1) fever—85 to 100 per cent
- (2) arthralgia—75 to 90 per cent
- (3) skin lesions—50 to 75 per cent
- (4) peripheral vascular lesions
- (5) fibrinous pericarditis
- (6) renal lesions—the most common cause of death
- (7) pleurisy and frequently bronchitis or pneumonia due to secondary bacterial infection (X-rays of the lungs are not helpful as a diagnostic means since there are no specific findings.)
- (8) liver failure and gastrointestinal pathology, which are seen less frequently

The prognosis for SLE has been considered very poor, but it is affected by the type of onset, with an acute onset having a worse prognosis than with an insidious onset. The prognosis is especially poor in women of childbearing age and is made worse by renal involvement, especially if the renal lesions occur early in the course of the disease. Acute SLE has a high maternal mortality rate and an even higher fetal mortality rate.

Between 62-89 per cent of all cases of SLE are reported to have renal abnormalities. In one series, uremia was the cause of death in 34 per cent of cases. Most investigators feel abnormal urinary findings are present during exacerbations

of SLE, disappearing with remissions. Microscopic hematuria is considered indicative of active lupus nephritis. Azotemia is present in more than one third of patients with lupus nephritis and is usually progressive. It is reported that at least 15 per cent of patients with lupus nephritis develop the nephrotic syndrome.

LUPUS NEPHRITIS

Farmer and Ferguson² feel that many tests are necessary to determine the presence and severity of lupus nephritis, with renal biopsy aiding in diagnosis as well as with prognosis and formulation of therapy. Pollak and associates³ reported that patients in whom renal biopsy was normal or showed only glomerulitis usually had a good prognosis. In those cases with lupus glomerulonephritis demonstrated at initial biopsy, there was a poor prognosis with 68 per cent of one series surviving less than three years. It is felt that early accurate diagnosis of the specific type of renal lesion is important, for the prognosis in patients with active lupus glomerulonephritis is greatly improved with early corticoid therapy in adequate dosage.

Greenhouse⁴ points out the frequency of neurological complications in lupus, with convulsions and mental changes being the most common manifestations. He reports that chorea can be a frequent manifestation of SLE, with the underlying neuropathology resulting from cerebral angiitis causing widespread damage to small cerebral blood vessels.

Mintz and Fraga⁵ reported on the vascular manifestations of SLE in six patients with disseminated arteritis. These cases showed vascular lesions of the skin, cerebral arteritis, and acute lesions in most organs of the body. These authors feel it is important to recognize cutaneous arteritis in patients with SLE because it is indicative of similar lesions in other organs. Neurologic and psychiatric changes in patients with SLE are believed due to the existence of cerebral arteritis, which carries an extremely poor prognosis.

SLE EXACERBATIONS

Drug reactions, respiratory and other infections, exposure to sunlight, and other stressful factors may cause acute exacerbations of SLE, and all these should be avoided insofar as possible. There is no specific treatment for SLE but corticosteroids seem to control the symptoms. The long-term outlook for a patient depends on the ability to control the activity of the disease on small doses of steroids such as 5 mg. Prednisone

two or three times a day. The smallest effective dose should be used, with the clinical condition of the patient being the determining factor. Other methods of treatment include ACTH, salicylates, antimalarial preparations and control of secondary symptoms. It must be remembered that patients with SLE are unusually sensitive to drugs and drugs should not be given indiscriminately.

Adjunctive measures of diet, rest, and control of anemia deserve the closest attention.

CASE REPORT

This white female born June 1939 has a fairly uneventful childhood except for frequent respiratory infections and asthma. In April 1955 just before her 16th birthday, she was noted to have a facial rash. This soon became typical discoid lupus for which she was treated with Aralen, and the rash was kept under control with Aralen and avoidance of sunlight. In 1957 her respiratory symptoms became more severe, and she was begun on desensitization for multiple allergies.

In the spring of 1961 following treatment for a strep throat, the patient developed apparent acute nephritis. Since it was felt this might be the beginning of acute disseminated lupus even though her LE cell preparation was negative, treatment was begun with Aristocort 4 mg. three times a day. This dose was decreased and in July 1961 she was placed on Medrol 2 mg. twice daily. She continued in fair condition, but her urinary protein output increased and in December 1961 her cortisone dosage was increased to Medrol 4 mg. twice daily. Edema became noticeable at that time and she was begun on HydroDIURIL 25 mg. twice a day until her weight came down to normal. In January 1962 a positive LE prep was obtained. Edema became worse and urinary albumin was increasing, but edema was controlled fairly well with Thimerin as well as oral diuretics.

In February 1962, she apparently had a severe exacerbation and was critically ill. She was given transfusions, ACTH and supportive treatment, being sent home on Diuril, Prednisone, and high protein diet. Her BUN at that time was 15.4. She continued to do quite well, but her urinary protein continued high with a low blood protein and a low AG ratio. The patient remained on cortisone, diuretics and symptomatic treatment until May 1963 at which time she had a reaction to Thimerin and her edema began to increase. Various diuretics were tried without much success until she was begun in August 1963 on Aldactone

A. This gave immediate improvement in the edema, but her general condition continued unchanged with high urinary output of protein. She appeared in remission with moderate rise in BUN and in December 1964 BUN was up to 30.

The patient's blood pressure began a slow rise in 1964 but was controlled with diuretics alone. In April 1965, the dosage was increased to Aldactazide A one four times a day. She continued in apparent remission as far as any acute symptoms were concerned, though her blood pressure continued to rise, her urinary protein continued high, and in November 1965, she was begun on Aldomet in an attempt to control her rising blood pressure. This dose was increased to one four times a day in addition to the Aldactazide four times a day, and since that time, she has remained quite stable with blood pressure regulated around 150/90 and BUN stable at 27 to 28 mg. per cent.

Her medications at the present time include Prednisone 5 mg. three times a day, Aldactazide and Aldomet one of each four times a day, oral vitamins, iron, and Maalox. Her chief difficulty aside from her kidney damage seems to be her fragile skin. The susceptibility to lacerations from minimal injury appears to be on the basis of her long-term cortisone therapy.

This is a proven case of disseminated lupus erythematosus which became acute six years after the discoid rash was noted. This patient has now lived 12 years with her disease and is apparently in mild remission. ★★★

601 N. Oak Ave. (38771)

REFERENCES

1. Lee, S. L.; Rivero, I., and Siegel, M.: Activation of Systemic LE by Drugs, *A.M.A. Arch. Int. Med.* 117: 620, 1960.
2. Farmer, C. D. and Ferguson, R. H.: Diagnosis and Treatment of Lupus Nephritis, *Med. Clin. North America* 50:1119, 1966.
3. Pollak and Associates: Lupus Erythematosus, *Medical Times* 94:56, 1966.
4. Greenhouse, A. H.: On Chorea Lupus Erythematosus and Cerebral Arteritis, *A.M.A. Arch. Int. Med.* 117: 389, 1966.
5. Mintz, G. and Fraga, A.: Arteritis in Systemic LE, *A.M.A. Arch. Int. Med.* 116:55, 1965.
6. Richardson, John: Lupus Erythematosus, *Medical Times* 94:56, 1966.
7. Tuffanelli, D. L. and Leeper, R. W.: The Skin in Lupus Erythematosus, *Medical Times* 94:549, 1966.
8. Harris, M. Y.; Mills, G. C., and Levin, W. C.: Co-existent Systemic Lupus Erythematosus and Porphyria, *A.M.A. Arch. Int. Med.* 117:425, 1966.
9. Gallo, R. C. and Forde, D. L.: Familial Chronic Discord Lupus Erythematosus and Hypergammaglobulinemia, *A.M.A. Arch. Int. Med.* 117:627, 1966.

The Physician's Role In Community Mental Health

R. LAYTON McCURDY, M.D.

Atlanta, Georgia

NO GREATER MEDICAL PROBLEM exists today than that of devising improved methods of treating the mentally ill and at the same time formulating effective ways of preventing such illness whenever and wherever possible. The impetus to improve the care of the mentally ill and develop better programs for raising the level of mental health in the nation is probably greater than most physicians realize.

The medical profession will either have to assume strong leadership in this rapidly changing field or run the risk of having this role taken over by other disciplines. In view of the central importance of medicine in the diagnosis and treatment of mental illness, it would be most unfortunate if professions with more peripheral interest were to assume the primary positions of leadership, but this is what they may do if medicine does not discharge the responsibilities that so clearly belong to it.

The most current product of this impetus is the community mental health movement. It may be helpful if I review briefly the history of this movement in the United States. In 1955 the Joint Commission for Mental Health and Illness was set up by federal law. A six-year study ensued to determine what were conditions of treatment of the mentally ill in this country and how they could be improved. This commission published a report in 1961 entitled, "Action for Mental Health." The report describes the immense proportions of mental illness in this country and how it affects so many lives today. It deals with the issues of treatment and how treatment of mental illness for the indigent has traditionally been the responsibility of state governments.

From the Department of Psychiatry, Emory University School of Medicine.

Read before the Section on General Practice, 99th Annual Session, Mississippi State Medical Association, Biloxi, May 15-18, 1967.

The private treatment of mental illness has been hampered by its high cost and the relative shortage of trained manpower. Most often the mentally ill are treated at the outset by their own physicians. If they become severely ill they are removed to a state hospital which is often geographically distant to the patient's own community. After dealing with the acute illness, the

The impetus to improve the care of the mentally ill and develop better programs for raising the level of mental health in the nation is probably greater than most physicians realize, writes the author. The medical profession will either have to assume strong leadership in this rapidly changing field or run the risk of having this role taken over by other disciplines, he states. The responsibility for each physician's participation in the planning and operations of these programs lies within himself, he concludes.

patient is returned from the geographically distant hospital to his own physician for follow-up.

In a great many instances this has worked satisfactorily, but it seemed to the commission that it would be more appropriate if all phases of treatment could be carried out locally in order to avoid the geographical disruption which usually accompanies the personal disruption of acute mental illness.

This report, coupled with public concern, resulted in the Community Mental Health Act of 1963. This act provides matching federal funds for construction of physical facilities in order to provide comprehensive care locally. Comprehensive care was defined by the law as consisting of 10 elements, five of which were deemed essential. They are: (1) inpatient treatment, (2) out-

patient treatment, (3) partial hospitalization (such as day hospitals and night hospitals), (4) 24 hour emergency treatment, and (5) mental health consultation to local agencies such as schools, welfare agencies, and law enforcement agencies.

The law was designed to help with construction of facilities which would make up these comprehensive services. From the beginning it was hoped that a comprehensive program could be developed around some existing treatment facilities in the community. The most logical of these would be the local general hospital which might already have psychiatric beds. Federal matching funds could then be obtained to construct a building (if needed) for outpatient and the other services. It was not intended that a center be constructed in isolation from the medical community.

The law defined a community as being from 75,000 to 200,000 people, and each state was given the responsibility to define the community mental health areas within the state boundaries. Funds were made available to state governments to plan for these programs. This has resulted in a plan from each of the 50 states.

In 1965 Congress amended the law to provide matching funds to community mental health programs to help with staffing and operation of these centers. The matching funds were on a formula of 75 per cent in the first year with this percentage decreasing over the subsequent three years so that federal support would not be given in the fifth year of operation. As with most federal programs, considerable criticisms were raised with the Community Mental Health Program. One of the most trenchant criticisms is that the law was designed principally for large urban areas. Often in sparsely populated states a community containing 75,000 or 100,000 people would cover quite a bit of territory geographically. It seems to me that this is a valid criticism of the existing law and that, in time, some modification must be made.

COMMUNITY CONCEPT GENESIS

Many factors contributed to the development of the community mental health concept. I would like to point out a few of the more important ones. First, it had been found from experiences with combat-induced mental illnesses during the Second World War, that early, vigorous treatment of a developing mental illness often resulted in a shortened duration and a rapid return to function. In fact, oftentimes an early return to function by the patient contributed to the rapid rehabilitation of his illness.

Secondly, the development of phenothiazine and other drugs effective in the treatment of mental illness permitted treatment of seriously disturbed people with adequate control of their behavior so that their families could tolerate their presence. Prior to the availability of these drugs there was little opportunity to control bizarre behavior, and isolation from the family was a necessity. Thirdly, the increasing interest and ability of non-psychiatric physicians to deal with emotional and mental illnesses provided an opportunity for treatment of the patient by his own physician at home. The availability of local psychiatrists to consult with non-psychiatric physicians in this type of treatment program would inevitably enhance the treatment of mental illness.

PHYSICIANS' ROLE

It is to this last point that I would like to address my remarks today. In carrying out these programs there is no thought that physicians who are not psychiatrists should become such, nor that they should engage in undertakings unrelated to their medical practice. Instead, the goal is to take advantage of their medical knowledge and create a greater awareness of, and ability to deal with, those factors of emotional origin that affect every person with any kind of disease or injury. In addition, the physician's role as a citizen, serving on committees and boards of various private and governmental agencies, must be examined to see how his role as a promoter of high medical standards can be made more effective in the field of mental illness and health.

Another basic assumption is that the tasks for caring for the mentally ill, of finding and diagnosing early cases of illness before the patient is incapacitated, and of developing methods of treatment for such illness, are greater than can be accomplished in the time available by all specialists now practicing psychiatry. In fact, it would require more time than could be given by all members of the medical profession even if all physicians were fully aware of the emotional components of the illnesses of their patients and were skilled in dealing with them.

Ways must therefore be found to help people learn to deal with stress effectively and without becoming ill. This means, among other things, that physicians must unite in collaborative efforts with agencies and institutions concerned with improving the conditions of living in any particular community. There is some hope in the issue that the answer to mental illness lies in finding some hitherto undiscovered biochemical, physiological, or anatomic abnormality to account for disordered

behavior. Until these discoveries are made (and some will be made) those interested in the welfare of the emotionally disturbed and mentally ill will, of necessity, have to make the best use possible of the knowledge we now have.

Often physicians shy away from community mental health programs because they hold the following views: (1) Too many non-medical persons are participating in the solution of problems that are basically medical. This implies a change in the nature of medical practice not acceptable to many physicians. (2) Governmental funds (particularly federal) for mental health programs in comprehensive mental health centers will lead to increasing involvement and eventual control. (3) The medical profession is being stampeded into making plans for the mentally ill and for the prevention of mental illness that it is ill-equipped to make. The position arising from this viewpoint is that we should wait until more facts are available before action is taken. (4) Private practice will be de-emphasized or even eliminated.

It is my opinion that private practice, both in psychiatry and in all other areas of medicine, will flourish as it never flourished before, if community mental health projects become really effective. In most instances responsibility for each case will remain with the physicians in the community; family physicians and private psychiatrists will cooperate in treatment, rather than passing seriously ill patients on to an institution that must, of necessity, give somewhat impersonal care.

PSYCHOTHERAPEUTIC INFLUENCE

The physician is already doing the main portion of the work of treating the emotional disturbances of the patients in his community. Some physicians do this very well. Others are uncomfortable in the role. In any case, whatever can be done in aiding all physicians to improve their skill and confidence in treating the emotional aspects of their patients' illnesses will be worthwhile. A positive psychotherapeutic influence is the stock-in-trade of every physician.

Continuing education in this regard is most important. It has not yet been definitely determined just what types of professional postgraduate activities are most effective, but experience suggests that occasional lectures or other exercises of a didactic nature are not particularly valuable. Knowledge may be a prelude to learning, but by itself it is not enough. What appears to be more effective is interchange between psychiatrists and other physicians at the time the latter are strug-

gling with various aspects of treatment of patients who display emotional conflict.

It would be valuable if, through establishment of an efficient program, psychiatrists in private practice could devote a portion of their time each week to consulting with their medical colleagues on problems of treatment. Not all psychiatrists can do this effectively; some are excellent. The primary physician should not become an amateur psychiatrist. The purpose is for him to familiarize himself with the principles and uses of psychiatry to an extent appropriate with the incidence of emotional disorders in his patients.

EMERGENCY SERVICES

An excellent opportunity for constructive collaboration between a psychiatrist and another physician lies in the development of more efficient emergency services. Experience with such organized services in the last decade indicates that many disturbed patients (perhaps 50 per cent) would not have to enter mental hospitals if skilled help was available at the outset of their acute difficulties. One area for this collaboration is in the community mental health program offering inpatient and outpatient services such as a general hospital. This kind of arrangement would provide a freedom of consultation at the most efficient level, namely—the care of a patient.

Comprehensive care implies that a therapeutic environment exists in a community as well as a hospital, and that there should be a continuity of care from the outset of an illness to its disappearance. To achieve best results, treatment should be close to home, the patient staying on the job when possible and with his family or friends and familiar surroundings. A high degree of understanding and tolerance of emotional conflict by people in the community decreases the patient's fears of the effects of his disorder. Physicians who are aware of emotional aspects of illness and psychological problems are capable of handling many of these problems and are not limited by fear or anxiety in doing so, and they know when to refer a patient to a psychiatrist. In short, the key word in comprehensive care is flexibility in all aspects of patient management.

MANPOWER SHORTAGE

These ideals are not now being achieved because of lack of personal skills, lack of manpower in the health professions, inadequate collaboration with other disciplines, and lack of financial resources. No citizen is in a better position to en-

courage this use of a community as a preventive, therapeutic, and rehabilitative agent than the physician.

It will be all too easy for the practicing physician to isolate himself from the developing mental health program in his own community. This isolation can be either professional or as an important citizen. The possible causes of this isolation have been covered. In brief, they can be the involvement of nonmedical people, governmental influence, and the possible challenge of private practice. This isolation can be the most damaging factor to the development of high level mental health programs. Unfortunately psychiatry as a specialty of medicine has too often tended to isolate itself from the rest of medical practice. This varies from community to community. This isolation will also

be damaging to the development of local mental health programs.

In my opinion the most important role of the physician in community mental health programs will be to fight this natural isolation. I think that it is a responsibility of every physician to be well informed of the current developments for mental health programs in his own community; moreover, to be a leader in this development. As I stated at the outset, it would be most unfortunate if other professional disciplines were to assume the primary position of leadership in these programs. The responsibility for each physician's participation in the planning and operation of these programs lies within himself. This responsibility must not go unheeded. ★★★

904 Barton Woods Rd. (30322)

FOR THE BIRDS

Two Chicagoans were viewing the controversial abstract sculpture which Picasso recently gave to the city.

"I don't understand it," said the first man, "but I'll say one thing for Picasso in revolutionizing sculpture."

"How's that," queried the second.

"Have you ever seen a madder flock of pigeons?" was the retort.



The President Speaking

'The Most Important Dues'

TEMPLE AINSWORTH, M.D.

Jackson, Mississippi

THE HARD-FOUGHT summer primaries and the upcoming general elections underline the fact that the political selection process comes around in Mississippi with the same frequency as Christmas. This year, we select state and county officials, including a chief executive and a legislature. In 1968, we will join with other Americans in the selection of a President, a Vice President, an entire House of Representatives, and a third of the Senate.

In 1969, the municipal elections, no less important than the others, are on the agenda, and in 1970, we have the off-year congressional campaigns, only to relax for a few months before beginning the cycle all over again.

American medicine has declared itself for solid, sound government by creating the American Medical Political Action Committee. In every state, there is a medical association-sponsored counterpart in the state PAC. Our interests, for the greater part, have been limited to congressional elections and properly so, for it is in the halls of the Congress that the circumstances under which medicine is practiced are forged.

Our PAC's are serving healthy and useful purposes. They are influential in the political equation, because those whose views oppose the physician are also on the political scene with dollars and willing hands. We cannot afford anything less than full success for our medical political action effort.

Beginning with the new association year, dues for AMPAC and our own MPAC will be billed to each member with his local, state, and AMA dues. PAC dues are voluntary and are not deductible for tax purposes; the billing statement will make this clear. But it will be a convenient opportunity for all of us to stand up and be counted, not just for American medicine but for good government as well. The modest amount for AMPAC and MPAC may be the most important dues a Mississippi physician pays in 1968. ★★★



Smoking and Health: Trouble Is 100 mm Long

I

"FOR LONG-LASTING, deep-down comfort, smoke Carcinos, made with the exclusive rabbit's foot filter." This tongue-in-cheek cigarette ad is on an outdoor display signboard, appropriately situated in a cemetery, in a recent editorial cartoon by the noted *Washington Post* satirist, Herb Block. But the puffing public isn't buying the message; rather, it is buying the product at the greatest volume and highest price in smoking history. As far as the typical American smoker is concerned, the Surgeon General's Report on smoking and health in 1964 is a scientific drama, so much sound and fury which for him signifies nothing.

The initial impact of the Surgeon General's report lasted less than a year when, it is to be supposed, the typical smoker found that he had not yet expired from cancer, coughed about the same, and still had enough wind to get around 18 holes on Saturday afternoon on two soft drinks and a pack of cigarettes. These irrefutable facts having been introduced into evidence before the tribunal of personal justification and preconceived rationalization, there simply wasn't any reason for him to be concerned. After all, cancer is what happens to the other guy, and even the pastor of the church coughs.

For every American who really quit smoking after the 1964 report, it is likely that two or three others stepped up to the tobacco counter to pay their money and take their choice of brightly packaged trouble in convenient packs

of 20 each. Tobacco stocks on the Big Board may have hesitated a little, but their satisfactory performance, the steady dividends, and continuing product diversification in a competitive market are hardly indicators of Americans having kicked the habit.

On the contrary, there are more new brands than ever before, each continually promoted through every communications medium. About the surest fact at the moment is that health hazards come in different sizes: The most recently developed one is 100 mm long.

II

Whether we like to admit it or not, there are two camps in the smoking and health issue with hordes of double agents working both sides of the street. And since everybody wears white hats when discussing the matter, you can't tell the good guys from the bad guys.

Various levels of government, many prestigious organizations and professional groups, and most responsible segments of society readily concede that smoking can't be harmless. For example, the U. S. Public Health Service has done and is doing a monumental job of sifting data, coordinating research, conducting public education, and in general, warning the public of smoking hazards. But a few blocks down Maryland Ave. in Washington, the Department of Agriculture is diligently preparing new price-support legislation for tobacco growers and doing an outstanding

job of cooperating with the tobacco manufacturing industry on promoting product sales. Color motion picture films on American cigarettes for use in foreign markets have been made with our tax dollars.

Another glaring example is the electronic communications industry. Under Federal Communications Commission edicts, a television network is obliged to give equal time when one side of a controversy gets a little more airing than the other. The TV moguls walk on eggs when carrying such subjects as voter registration, open housing, and labor-management issues. But there's little enough on smoking and health flickering on the screen in the living room, and whatever the reason for this lack of programming, it isn't because of a talent shortage or for want of ample script materials.

On the other hand, exciting entertainment in prime time slots is not infrequently interrupted to tell us about springtime, good-humored flavor-grabbers, the inboard, outdrive cabin cruiser redeemed from coupons, and a challenge to fight before agreeing to switch to another brand which doesn't have a filter made (exclusively) from Pompeian lava and the charcoal of betel nut shells.

III

In varying degrees, most medical associations have adopted policy pronouncements either condemning the use of tobacco or warning of the possible consequences of it. With the exception of a few specialty societies, the condemnation route has been avoided in favor of the more conservative warning, usually backed with an impressive prologue generally calculated to say something to everybody.

It would be grossly unfair to say that medical organization isn't concerned over the tobacco use issue, because the record amply proves that it is. What is being done is a good deal more important than what is being said. The American Medical Association is sponsoring a \$10 million research program on smoking and health. A very considerable portion of the American Cancer Society's resources is devoted to this burning question. Tens of millions for federally-sponsored research is being spent.

But, understandably, medical organization is so caught up in scientific and policy challenges on every front that it finds itself in the uncomfortable posture of having to assign priorities to issues to be met. And since the issue of financing

medical care—and who will do the financing—is crucial to continuation of traditional practice patterns at the moment and in the foreseeable future, it is receiving the attention of the organizational artillery. This is not, by any stretch of the imagination, to say that smoking and health and a plethora of equally important subjects are being ignored, because as with individuals, governments, and nations, a time will come for each.

IV

Second only to the Public Health Service, the Congress has met the tobacco and health issue with candor. Unlike the Public Health Service, the Congress has moved more conservatively at a judicial pace. When the pressure was on to amend the Federal Trade Commission laws with reference to product claims and labeling, the issue was compromised with the cigarette pack label, "Caution: Cigarette smoking may be hazardous to your health." The advertising copy was deemed immune on the proviso that questionable claims were omitted.

Some said that the Congress knuckled under to the tobacco lobby when the latter astutely agreed to the package label in preference to tougher laws. In any event, the matter is again



Copyright 1967, Mississippi State Medical Association

"I can't find anything wrong with you, except that today is Friday."

before the Congress, and the Subcommittee on Consumers of the Senate Commerce Committee has been conducting hearings.

The safety of cigarettes has been the issue with long, involved testimony on the Strickman-Columbia University filter; the compound, Chemosol, which was developed in a credible scientific climate by reputable scientists; and even "digital air control," which is a fancy name for a cigarette with a hole in the side.

The Strickman filter is said to be much more effective than any in use. Chemosol, said by its developers to be biologically inert, inhibits formation of 3:4-benzopyrene in cigarette smoke, a substance described in the Surgeon General's report as the worst of the seven carcinogens present in the product of tobacco combustion. Moreover, it is said to reduce the nicotine content of cigarette smoke by 22 per cent.

The hole-in-the-fag theory was propounded by a physician, and the idea is to reduce tars in the smoke by 60 per cent through air mixture.

V

But, retort those who are convinced, all of this is so much eyewash and window dressing, because there can't be a "safe" cigarette, not if it is smoked with sufficient frequency and inhaled. The odds are on their side, and their mounting fund of evidence demands the serious consideration of anybody in the puffer club.

What is needed is education—massive education—where the facts are marshalled and forthrightly presented with equal time to the easy sell. Our typical American wouldn't consider for a moment putting low octane gasoline in his new automobile. He believes in preventive maintenance for the air conditioner in his home. He would not dare expose himself to physical danger where the chance of injury is 10 times greater than walking down the street. Yet, he lights up at the rate of 15 to 70 cigarettes a day, and his greatest concern is the fact that the state is slapping a tax of eight cents a pack on his habit.

We must have more such efforts as the Mississippi Interagency Committee on Smoking and Health where educational effort is being directed toward young people. We need more concern in organizations working among our youth, with labor, and with cultural and civic leadership. We must also continue research, if only to confirm further the facts so clearly demonstrated by investigations of the past. And we ought also to consider the social aspects of the problem, recognizing that something other than physical may also be involved.

So when next reading a favorite magazine, the

newspaper, or watching television, be aware when millions are spent to remind you: Trouble is 100 mm long.—R.B.K.

STP Revisited: Journal Erratum

A JOURNAL editorial in the August issue discussed the new and powerful hallucinogenic compound which has been popularly tagged STP. Source material for the editorial, believed to be accurate, turned out to be quite amiss as to the agent's pharmacological family and discoverer. Erroneously, the JOURNAL attributed discovery of STP to Lakeside Laboratories of Milwaukee, a respected manufacturer of ethical pharmaceuticals and once the JOURNAL's single biggest advertiser.

It turns out that Lakeside did not develop STP, has not investigated it, nor has it been involved in its distribution. Moreover, STP is not a member of the piperidyl benzilate group, as the JOURNAL was first led to believe. The Food and Drug Administration has identified it as methyl dimethoxymethylphenylethylamine. The research laboratory code, JB-314, also associated with STP in the JOURNAL, was a Lakeside designation for methantheline bromide, employed as a standard during investigation of several new antispasmodics. JB-314 has nothing to do with STP.

The JOURNAL is indebted to Dr. William C. Janssen, director of clinical research at Lakeside, for his correcting this misinformation and for setting the record straight. The JOURNAL regrets publication of incorrect source information and thanks Dr. Janssen both for his patient explanations and for agreeing in the folly and danger of using any such agent.—R.B.K.

AMA-ERF: A Positive Force

"The Medical Center must develop new programs and strengthen existing ones. Budgets and appropriated funds, although generous in some areas, are never enough to meet new needs, and we must rely heavily upon the work of the American Medical Association and the AMA-ERF gifts. They have been a positive force in medical education in Mississippi in the past. They will be even more vital this year and the next."

These are the words of Dr. Robert E. Carter, dean and director of the University Medical Cen-

ter. A better testimonial to the purposes and goals of the American Medical Association Education and Research Foundation has never been written, and every former contributor ought to take understandable pride in the meaning and work of his gift.

AMA-ERF isn't just another worthy cause, loftily promoted for the good of mankind by some high-sounding outfit a thousand miles away. To be sure, it is all of these things, but it does its work at home, too. From a modest beginning in 1951 with a token distribution of funds to medical schools, the Foundation now supports an AMA Institute for Biomedical Research, backs and sponsors the Student Guarantee Loan Fund, and continues to give—in useful measure—to medical schools.

Not a penny of anybody's gift to AMA-ERF is taken for administration or promotion; the Foundation's expenses are paid in full by AMA, so a dollar given is 100 cents for the program. Moreover, the donor may specify exactly how all or part of his gift is to be used. Of course, it's all tax-deductible, too.

The third appeal for AMA-ERF contributions to American physicians was sent last month. Dr. Carter, speaking for the University Medical Center, has written each Mississippi physician more of a testimonial for the Foundation than an appeal. Let all who will respond in generous measure in support of the doctors' own program of voluntary assistance to their profession, its fountainheads of learning, and to inquiry into the life sciences.

As Dr. Carter so aptly says, it is a positive force.—R.B.K.

India: Too Late for the Pill

The second most populous nation on the face of the earth, India with her 600 million, is on the edge of starvation. The population explosion is leading her to national suicide, and a recent Associated Press spotlight study by correspondent Joe McGowan, Jr., pointed out that Calcutta, one of the world's largest cities, is "sinking under a creeping tide of poverty, unrest, crime, and human degradation." It could, McGowan writes, drag all of eastern India into chaos.

That this is a medical as well as a social crisis is underscored in the desperate programs of the

government. Sriporti Chandrasekhar, the national minister of health, has a three-pronged proposal to cut the short fuse on the population explosion: Ban all teenage marriages, liberalize the abortion laws, and introduce compulsory sterilization. In India, it appears to be too late for the pill.

Under the sterilization law, the health ministry proposes compulsory sterilization of every Indian male who has fathered three children. Reports have it that this would initially include 46 million Indian husbands. Of India's 17 states, 15 officially favor the proposal. Health Minister Chandrasekhar says that "we have to do it, because there simply is not enough food to feed the people we already have."

Until the health ministry can get its sterilization legislation—and this appears to be a certainty—it is resorting to gimmickry almost repugnant to western mores and most assuredly to American medical ethics. Chandrasekhar is now promoting



Copyright 1967, Mississippi State Medical Association

"No, no, not those cheeks—the other ones."

voluntary sterilization by offering each male submitting himself to the procedure a free transistor radio, a highly prized personal possession in Kipling's "backward state."

It is an ironic footnote that the state of West Bengal, Calcutta's province, once flourished under the British. If nothing more, the white-helmeted Bengal Lancers cleaned out the warring tribes and bandits and contributed to the city's having 15 per cent of all manufacturing and 30 per cent of all bank clearances. Now in poverty, crime, degradation, and near-chaos, West Bengal has a communist government which cannot do anything about the mess that helped bring it to power.

India is a nation going down with the population going up. It's too late for the pill.—R.B.K.

Detroit Doctors: They Stand Tall

It was no practice run for the Committee on Disaster Care of the Wayne County Medical Society on Sunday evening, July 23. The first firebomb had been thrown and the crack of snipers' rifles signaled the beginning of the worst riot in American history, one which was to try Detroit generally and its health care team in particular.

Peter Hoheisel of the Michigan State Medical Society executive staff described it this way: "For three days, they poured in. The fireman shot between the eyes, the small child with minor lacerations, and the sniper with only a small patch of blood on his T-shirt, indicating a bullet hole in his stomach."

Wayne County physicians and allied professional personnel rose to the occasion with a carefully articulated disaster care plan. Because of their location, three hospitals cared for most of the 728 riot casualties treated, Henry Ford, Highland Park, and Detroit General. At the peak of the bloodshed and burning, more than 100 physicians per shift were on duty.

Heart of the Wayne County Medical Society's plan is the *triage* concept, so familiar to physicians with military service, where quick diagnosis, casualty classification, and treatment priority according to severity of injury are employed. Teams of physicians, nurses, allied personnel, and even medical students were rotated around the clock during the three days of the riot.

Spokesmen for the medical society said that the plan worked and that the only changes they would make in future emergencies would be faster rotation of the emergency care teams and the

provision of better housing for off-duty shifts in the hospitals.

Historically and almost without variation, physicians have responded and risen to disaster situations with promptness and effective service. Detroit was quite a difference from the Coconut Grove fire, the Donner Pass blizzard, the 1963 Mississippi Valley floods, and the Jackson and Topeka tornadoes. In the latter, no human hand wielded the forces of death and destruction, but in Detroit, as in the other wars of the so-called ghettos, there was a criminal assault upon society. The service of the Wayne County Medical Society stands a little taller and the effective care is a little more heroic for just these reasons.—R.B.K.



PERSONALS

J. A. BROWN of Jackson has announced the opening of his offices in the Hinds Professional Building at 1815 Hospital Drive. He will limit his practice to dermatology.

T. Y. FLEMING was presented the "Golden Deeds Award" by the Greenwood Exchange Club for his unselfish devotion to duty in his community of Minter City.

HARRY C. FRYE and WARREN A. HIATT of Magnolia announce the association of Henry L. Lewis, III, at the Beacham Memorial Hospital. Dr. Lewis was chief of aerospace medicine at the Fairchild Air Force Base, Spokane, Washington, for two and one half years.

RICHARD T. FURR of Ocean Springs announced the association of Dr. Louis E. Cowser in practice at 1800 Government St. in Ocean Springs.

W. BRIGGS HOPSON has joined the staff of the Street Clinic at Vicksburg. He is a native of Delhi, Louisiana, and received his medical degree at the University of Tennessee College of Medicine.

JOHN S. LAIRD of Union received a certificate and pin in recognition of 60 years membership in the Masonic Lodge. He is a past master of the Union Lodge.

EDWARD NORTH of Jackson has been elected president of the Northwood Exchange Club.

WILLIAM E. RIECKEN, JR., of Kosciusko has taken a year's leave of absence as Attala-Leake Health

Synirin®

ACETYSALICYLIC ACID (ASPIRIN)..... 5 GR.
 *PENTOBARBITAL (ACID)..... 1/8 GR.
 *Warning: may be habit-forming

Synirin provides prompt barbiturate potentiation of aspirin without limiting the therapeutic usage of aspirin. Both pentobarbital and aspirin begin their action together promptly and last 4 or 5 hours. There is no accumulation.

LITERATURE AND CLINICAL SUPPLY AVAILABLE TO PHYSICIANS

SYNIRIN is another
 pharmaceutical achievement

WM. P. POYTHRESS & CO., INC.
 RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856



Officer to earn a master's degree in Public Health and Administration at the University of North Carolina. He has served as full time health officer for Attala-Leake County District since 1959.

CURTIS D. ROBERTS has announced the opening of his office for the practice of pediatrics at McLaurin Medical Center. He recently completed a residency in pediatrics at the University Medical Center.

OMAR SIMMONS of Newton and his wife, Mrs. Ruth Toole Simmons, R.N., were honored on "Dr. Simmons Day." A graduate of the University of Tennessee College of Medicine, he has practiced medicine in Newton for more than 30 years. He is a past president of MSMA and has also served as president of the Mississippi Hospital Association and the Mid-South Postgraduate Assembly.

FRANK TATUM of Tupelo will assume office as Health Officer for Lee and Itawamba Counties. A graduate of Washington University School of Medicine in St. Louis, he has practiced medicine in Tupelo for the past two years.



NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association.

DEGIORGIO, EUGENE ROCCO, Amory. Born Chicago, Ill., December 29, 1920; M.D., Loyola University, Chicago, Ill.; interned St. Francis Hospital, Evanston, Ill., one year; surgical residency St. Francis Hospital, Evanston, Ill., three years; anesthesiology residency UCLA Medical Center, Los Angeles, Calif., two years; elected June 13, 1967, by Northeast Mississippi Medical Society.

THIEDE, HENRY ARMSTRONG, Jackson. Born Rochester, N. Y., October 2, 1926; M.D., University of Buffalo School of Medicine, Buffalo, N. Y., 1949; interned Buffalo General Hospital, N. Y., one year; Residency Buffalo General Hospital, N. Y., one year; residency Genesee Hospital, Rochester, N. Y., four years; elected June 6, 1967, by Central Medical Society.



POSTGRADUATE CALENDAR

ARTHRITIS SEMINAR

University Medical Center, Jackson
October 12 and 13, 1967

This program, sponsored by the Mississippi Chapter, Arthritis and Rheumatism Foundation and The University of Mississippi School of Medicine, will feature four eminent physicians as guest lecturers.

Speakers will be Dr. Adrian E. Flatt, professor of orthopedic surgery and director of the Division of Hand Surgery at The University of Iowa School of Medicine; Dr. Robert H. Freiburger, associate professor of radiology at Cornell University Medical College and director of the Department of Radiology at the Hospital for Special Surgery; Dr. Frederic C. McDuffie, consultant in microbiology at Mayo Clinic and assistant professor of microbiology and internal medicine at the Mayo Graduate School of Medicine, University of Minnesota at Rochester, and Dr. Colon H. Wilson, assistant professor of medicine (rheumatology) and associate in physical medicine at the Emory University School of Medicine.

TRAUMA TO THE HAND

University Medical Center, Jackson
November 10, 1967, beginning at 9:00 a.m.

Participants

Paul S. Derian, M.D., professor of surgery and chief of the division of orthopedics, University Medical Center

Martin B. Harthcock, M.D., clinical instructor in plastic surgery, University Medical Center

James H. Hendrix, M.D., clinical associate professor of surgery and chief of the division of plastic surgery, University Medical Center

Jack Kern, M.D., senior surgery resident, Tulane University School of Medicine, New Orleans, La.

Frank C. McCue, M.D., chief of hand surgery, Department of Orthopedics, University of Virginia Hospital, Charlottesville, Va.

Daniel Riordan, M.D., associate professor of orthopedic surgery, Tulane University School of Medicine, New Orleans, La.

Thomas C. Turner, M.D., clinical assistant professor of orthopedic surgery, University Medical Center

OCTOBER 1967

removes the mental blur



that clouds vision

SOLFOTON[®]

Each tablet or capsule contains

PHENOBARBITAL..... 16 mg.

(Warning: may be habit forming)

BENSULFOID[®] (See P D R)..... 65 mg.

Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.

Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING
WITHOUT PRESCRIPTION

— AVAILABLE —

Solfoton (*yellow, uncoated tablets "P"*)
100s, 500s, 5000s

Solfoton Capsules (*yellow and brown*)
100s, 500s, 1000s

Solfoton S/C (*sugar-coated beige tablets*)
100s, 500s, 4000s

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856

POSTGRADUATE / Continued

Friday Morning

INTRODUCTION

Dr. Derian

THE NORMAL HAND

Dr. Riordan

SKIN COVERAGE IN HAND INJURIES

Dr. McCue

TENDON REPAIR

Dr. Riordan

BONE AND JOINT INJURIES

Dr. McCue

MANAGEMENT OF NERVE INJURIES

Dr. Kern

Friday Afternoon

PATIENT PRESENTATIONS

PANEL DISCUSSION

Dr. Hendrix, moderator; Dr. Riordan, Dr. McCue, Dr. Harthcock, Dr. Turner

CIRCUIT COURSES

SOUTHWESTERN CIRCUIT

Natchez—October 17, Jefferson Davis Hospital, 7:00 p.m.

Session 1—Workshop in Doctor-Patient Relationships, Dr. Joseph Roberts, Dr. G. R. Baringer

NORTHERN CIRCUIT

Tupelo—October 25, November 1, November 8, North Mississippi Medical Center, 7:00 p.m.

Greenwood—October 26, November 2, November 9, Greenwood Leflore Hospital, 7:30 p.m.

Session 1—Headache

Neurological Approach, Dr. Robert Carrier
Neurosurgical Approach, Dr. Forrest Tutor

Session 2—Early Diagnosis of Cancer of the Cervix, Dr. Karl Bolten

Current Practices in the Management of Cancer of the Cervix, Dr. Richard Boronow

Session 3—Cardiac Emergencies

In Children, Dr. David G. Watson

In Adults, Dr. Patrick Lehan

FUTURE CALENDAR

October 12-13

ARTHRITIS SEMINAR

October 17

CIRCUIT COURSES, NATCHEZ

October 17-19

MISSISSIPPI ACADEMY OF GENERAL PRACTICE

October 25-26

CIRCUIT COURSES, TUPELO, GREENWOOD

November 1, 8

CIRCUIT COURSES, TUPELO

November 2, 9

CIRCUIT COURSES, GREENWOOD

November 10

TRAUMA TO THE HAND

November 30

DIAGNOSIS AND MANAGEMENT OF THE ANEMIC PATIENT

December 8

CARDIOPULMONARY RESUSCITATION

December 14

MODERN MANAGEMENT OF COMMON OBSTETRICAL COMPLICATIONS

January 5, 1968

OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE

January 23, 1968

CIRCUIT COURSES, COLUMBUS

January 25, 1968

ALIMENTARY TRACT PROBLEMS

February 1, 1968

UMC DAY

February 15, 1968

CLINICAL NEUROLOGY

February 20, 1968

CIRCUIT COURSES, NATCHEZ

February 27, 1968

CIRCUIT COURSES, COLUMBUS

March 1, 1968

SEMINAR ON RENAL DISEASES

March 5, 1968

CIRCUIT COURSES, MERIDIAN

March 14-15, 1968

RELIGION AND MEDICINE

March 27-29, 1968

CARDIOVASCULAR SEMINAR

April 1-2, 1968

AMERICAN BOARD OF SURGERY

April 2, 1968

CIRCUIT COURSES, MERIDIAN

April 11, 1968

DIABETES SEMINAR

80-lb. tackles — or 108-lb. housewives — Butazolidin alka can hasten recovery from the maddening pain of shoulder bursitis.

Not for every patient. Check carefully the Contraindications, Warning and Precautions shown below.

Adverse reactions may occur. The most common are nausea, edema and rash. Rarely, agranulocytosis has been reported. All adverse reactions are listed below, too.

For-pay or workaday patients — when they come up with shoulder bursitis and your clinical judgment indicates Butazolidin alka — go with it.

Watch the comeback.



Butazolidin alka may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with food to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. A severe skin rash has also been reported. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, dizziness, vertigo and languor may occur. Leukemia and leukemoid reaction have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid atrophy may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

6509-V(B)R2

Butazolidin[®] alka

Capsules

- 100 mg. phenylbutazone
- 100 mg. dried aluminum hydroxide gel
- 150 mg. magnesium trisilicate
- 1.25 mg. homatropine methylbromide

Dosage in painful shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

For complete details, please see full prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, New York



POSTGRADUATE / Continued

April 16, 1968

CIRCUIT COURSES, NATCHEZ

April 18, 1968

THORACIC SOCIETY

April 23, 1968

CIRCUIT COURSES, COLUMBUS

May 7, 1968

CIRCUIT COURSES, MERIDIAN

May 13-16, 1968

MISSISSIPPI STATE MEDICAL ASSOCIATION

NIH Plans Tumor 'Rescue' in CA Research

Important leads for human virus-cancer research are expected from a systematic search for cancer-causing viruses in naturally-occurring solid tumors of laboratory animals. These studies will involve a recently developed laboratory technique which makes use of animal leukemia viruses to detect evidence of the presence of solid tumor viruses.

As part of the National Cancer Institute's Special Virus-Leukemia Program, these investigations will be carried out collaboratively by scientists at the National Institutes of Health, Bethesda, Md., and the Jackson Laboratory, Bar Harbor, Me.

Supported by a Public Health Service contract, investigators at Jackson will study spontaneous solid tumors arising in their inbred mice of high and low leukemic strains. Their work will be based on research by Dr. Robert J. Huebner, National Institute of Allergy and Infectious Diseases, who has reported the ability of mouse leukemia viruses to "rescue" a solid tumor virus from tumors it is known to have caused but in which it is no longer present in infectious form.

In his work, Dr. Huebner inoculated newborn hamsters with the Moloney sarcoma virus (MSV). Solid tumors arose, as expected, but no infectious MSV could be recovered until tumor cells were grown in tissue culture with mouse embryo cells and the mixed culture inoculated with a murine leukemia virus. The leukemia virus, under these laboratory conditions, acted as a "helper" to the sarcoma virus, providing essential components of a protein outer coat and thus "completing" the MSV particle.

This successful "rescue" of the Moloney sarcoma virus, added to previous analagous findings


with the Rous sarcoma virus in chickens, has led investigators to believe that this may be a phenomenon which exists throughout nature and may have relevance in the search for a human sarcoma virus.


Therefore, at Jackson, where mice are bred in large numbers for genetic and other studies, Dr. Hans Meier, principal investigator for the project, and his associates will test this hypothesis by examining thousands of standard stock and retired breeders for naturally occurring solid tumors. Any found will be biopsied and diagnosed as quickly as possible. A cell-free extract of the biopsy tissue will be tested for various viruses and "rescue" experiments will be attempted. Additional studies, using frozen specimens, fresh tissues, tumor-bearing mice, and sera furnished by Jackson, will be carried out in the Bethesda laboratory of Dr. Huebner.


Dr. Michael Chirigos is National Cancer Institute Project Officer for the investigations.




DEATHS

 BEELER, JAMES MOSS, Meridian. M.D., University of Louisville, Louisville, Ky., 1917; interned Louisville City Hospital, Louisville, Ky.; residency Connecticut State Hospital, Middletown, Conn.; former director of East Mississippi State Hospital; Emeritus member of MSMA; died August 6, 1967, aged 73.

 EWING, M. Q., Amory. M.D., Georgetown University, Washington, D. C., 1919; interned Gallinger Memorial Hospital, Washington, D. C.; residency Baptist Memorial Hospital, Memphis, Tenn.; served as captain in U. S. Navy 1942-47; Emeritus member and past president of MSMA; past member of MSMA Board of Trustees; past vice chairman, Council on Medical Service; member of Southern Medical Association and of Southeastern Surgical Congress; died August 8, 1967, aged 71.

 HARPER, WILLIAM THOMAS, Fayette. M.D., Tulane University, New Orleans, La.; interned Charity Hospital, Shreveport, La.; post-graduate training Delaware County Hospital; died August 12, 1967, aged 71.

 WILLIAMS, ROYAL WILLIAM, Greenville. M.D., Jefferson Medical College, Philadelphia, Pa., 1919; interned Moses Taylor Hospital; Emeritus member of MSMA; died August 4, 1967, aged 71.



Book Reviews

Pathology. By Stanley L. Robbins, M.D. 1434 pages with illustrations. Philadelphia: W. B. Saunders Company, 1967. \$20.50.

The author indicates that his goal is to produce a text "for students and clinicians" and in this effort he has succeeded admirably. This is one of the most readable of all the textbooks of Pathology. The classical arrangement of General Pathology followed by Special (organ) Pathology is used by the author. The language is smooth and clear; the paper and print are easy on the eyes. Outlines at the beginning of each chapter make it easy to find specific subjects. Several chapters have been reorganized and it is apparent that the previous edition has been really updated with major modifications. Interesting chapters on "Genetics and Disease" and "Disease of Aging" have been added since the previous edition. A chapter on "Diseases of Immune Origin" is an expanded version of the old one on "Hypersensitivity and Collagen Diseases."

With the exception of an occasional fuzzy microphoto, the photographs are excellent. The only really detracting feature in the text to this reviewer is the patchy presence of small print paragraphs throughout the book. No doubt they save space, but they are slightly distracting, and the material in them does not necessarily seem to be less important than the adjacent large print paragraphs.

WILLIAM V. HARE, M.D.

Synopsis of Pediatrics. By James G. Hughes, M.D. Professor of Pediatrics and Chairman of the Department of Pediatrics, University of Tennessee College of Medicine. 1075 pages. St. Louis: The C. V. Mosby Company, 1967. \$10.85.

Dr. Hughes and twenty-six faculty members of the University of Tennessee College of Medicine have contributed to the second edition of this very useful synopsis of pediatrics, first published four years ago.

The authors intended this work as a source

of accurate, easily available, and up to date information for medical students, interns, and the busy practitioner. In this endeavour, they succeeded admirably; there is a wealth of comprehensive information in a relatively small space. The chapter on fluids and electrolyte problems, for example, is just twenty pages long and contains enough theoretical, practical and therapeutic information to be of equal value to the student before an exam and the practitioner at the bedside. The only objection I have to this particular outline of therapy is the advocacy of a somewhat large volume of replacement and maintenance fluids.

Additions to the second edition are the enlarged chapters on the urinary tract with excellent summaries of therapeutic measures and dosages appropriate for newborns and older infants; the chapter on autosomal abnormalities has tables listing the relatively common as well as the less frequently observed anomalies in Down's syndrome 18 trisomy and D₁ trisomy syndrome; and the chapter on cancer in childhood has been enlarged to include all the most common malignancies under one heading.

The tables which I find helpful in everyday practice are the ones on normal bone development; heart and respiratory rates and blood pressures, from birth to fifteen years; medical classification of mental retardation; schedules of immunizations; antimicrobial drugs of choice and alternative drugs for all commonly encountered infecting organisms; and drug dosages. The table on the physiologic peculiarities of the newborn infant is especially valuable in that it lists all the features of fetal circulation, respiratory, renal, and metabolic adjustments.

This volume is relatively small, and the printing is clear with bold type headings for each paragraph. The style is lucid and to the point. The index is complete and lists the diseases under both anatomic-physiologic and eponymic names. The binding is such that the volume can be opened flat on every page without breaking the book's back. It is a most valuable addition to anyone's professional library.

MARIA J. MANGOLD, M.D.

Don't let monilia cut broad-spectrum therapy short...

start with **Tetrex-F[®]** tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract... and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-

spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201



Dr. Wilson Is Installed AHA Head; Urges Hospital-Physician Team Effort

Dr. David B. Wilson of Jackson has been inaugurated as president of the American Hospital Association during the organization's recent 69th convention at Chicago. His 1967-68 president-elect is Dr. George W. Graham of Schenectady, N. Y., where he is director of the Ellis Hospital.

The Aug. 21-25 convention was headquartered at the Palmer House where the House of Delegates was in session. Exhibits and general sessions were conducted at Chicago's International Amphitheatre, a convention make-do substituting for the fire-raized McCormick Place initially scheduled for use at AHA's 1967 conclave.

In his inaugural address, described by the House of Delegates as "earnest and forceful,"



AHA's top leadership for the 1967-68 year are, left, Dr. George W. Graham of Schenectady, N. Y., president-elect, and Dr. David B. Wilson of Jackson, president.

Dr. Wilson underscored the partnership among hospitals, the medical profession, and prepayment plans, warned of impending changes in the hospital field, urged updated thinking in hospital

management, and remonstrated with the federal government over the operation of Medicare.

"It is imperative that hospitals and the medical profession find a way to work satisfactorily toward meeting the challenges of economic problems related to medical care," the new president said. He cautioned about overuse of hospital facilities, saying that "patients should be assured adequate hospital care, but there is also a need to develop incentives for both patients and doctors to use expensive hospital facilities only when necessary."

In seeking this goal, Dr. Wilson continued, hospitals and prepayment plans can have a useful partnership which should not be misinterpreted as hospitals "getting into the practice of medicine."

"Our hospitals can no longer operate as easy-going, independent institutions as part of a simple life," the president said. He urged updated thinking in hospital management and administration through evaluation, understanding, and new approaches in planning, regional programs, comprehensive health planning, education of allied health professions, and new administration techniques.

Dr. Wilson called for voluntary areawide planning as one control over mounting hospital expenditures, and he warned delegates that "if hospitals do not accept the responsibility for voluntary planning of hospital needs and services, the federal government is ready and willing to do so."

He said that as institutions of society, hospitals will assume the modern role which the public expects them to play or something else will come into being.

"The increase in volume of hospital-rendered services, coupled with the rise in total hospital operating expenses, has had a profound affect in the costs of medical care.

"Never before has the government spent so many billions for the nation's health care," Dr. Wilson added. "But paradoxically never have hospitals shouted so loudly that they are being grossly short-changed."

Defending the AHA's more than 7,000 member institutions, Dr. Wilson said that "I think it grossly unfair to place most of the blame on hospitals for rapidly rising medical costs. I would be the first to say that we can become more efficient, as any enterprise can, and we should make every possible effort in this direction, but we are not by any means on the edge of the 20th century as Secretary (of HEW) Gardner has said."

He asserted that hospitals are underpaid by Medicare and charged that refusal by the Social Security Administration to pay for part of hospital building costs is a source of financial instability for the institutions.

Dr. Wilson comes to the AHA presidency with long service in the organization and the hospital field. A former president of the Mississippi Hospital Association, he has been a member of the AHA Council on Governmental Relations and the Board of Trustees. Since its opening in 1955, Dr. Wilson has been director of the University Hospital, and he assisted in planning the medical center complex at Jackson.

He received the B.S. degree and two year medical certificate from the University of Mississippi and was graduated with the M.D. degree from Emory University School of Medicine. Later, he was awarded the Master of Public Health at Yale University. He is a colonel of Medical Corps in the Mississippi National Guard and commander of the 134th Surgical Hospital Group.

Dr. Graham, the president-elect, is director of the Ellis Hospital at Schenectady, N. Y. A native of Quebec City, Canada, he received both his premedical and medical degrees at McGill University at Toronto. He was in practice from 1942 through 1948 when he entered further postgraduate training in hospital administration.

AHA delegates also elected as members of the Board of Trustees Pat N. Groner of Pensacola, Fla., Samuel J. Tibbitts of Los Angeles, Dr. James T. Howell of Detroit, and Dr. Richard O. Cannon of Vanderbilt University.

Principal speakers before the 69th convention included the U. S. Surgeon General, Dr. William H. Stewart, and the president of the Rand Corp., defense research organization, Henry S. Rowen.

The new Board of Trustees named 37 new members to AHA's nine councils, as delegates gave approval to reports in what was described as a harmonious session of the House.

An unusually large registration of Mississippi hospital administrators and leaders recorded sup-

port of the state association for Dr. Wilson on the occasion of his inauguration.

AMA Clinical Conclave Has Varied Program

A scientific program especially designed for the physician in practice again will be featured at the AMA's Clinical Convention, to be held November 26-29.

The four-day meeting will include scientific sessions on 18 major topics, four postgraduate courses, breakfast roundtable conferences, closed-circuit television and medical motion picture programs, and more than 150 scientific exhibits.

Scientific and industrial exhibits and all scientific meetings will be in Houston's new Astro Hall, a part of the Astrodome complex.

Topics at the general scientific sessions include: aerospace medicine, antibiotics, arthritis, cancer, cardiovascular medicine, cardiovascular surgery, dermatology, endocrinology, gastroenterology, general surgery, genitourinary treatment, geriatrics, obstetrics and gynecology, ophthalmology, otolaryngology, pediatrics, and psychiatry. There also will be a session on "new cares" featuring a discussion of legal and social problems now faced by the physician.

Breakfast Roundtable Conferences will discuss "Indications and Limitation of Uses of Antibiotics," "The Moral and Ethical Aspects of Caring for the Dying Patient," "Management of Cerebrovascular Insufficiency," and "Adolescence, Age of Rebellion; Some Related Psychiatric Aspects."

An outstanding program of closed-circuit color television and more than 25 medical motion pictures will be presented. Live, color television broadcasts of surgery and discussions from Houston's Hermann Hospital will be seen on a large screen in Astro Hall. Medical motion pictures will include three or four premier showings, plus several films that were well received at the AMA annual convention last June.

The AMA House of Delegates will meet at the Shamrock-Hilton Hotel.

The Ninth National Conference on the Medical Aspects of Sports will be Sunday, Nov. 26, at the Hotel America in conjunction with the Clinical Convention. Sponsored by the AMA Committee on the Medical Aspects of Sports, the meeting will feature morning, afternoon, and evening discussions of problems faced by team physicians at all levels of athletic competition.

Publisher's Widow Endows Chair of Medicine

Dr. Buris Boshell of Birmingham, professor of medicine, Medical College of Alabama, has been appointed Ruth Lawson Hanson Professor of Medicine in Diabetes and Metabolism, according to an announcement by Dr. S. Richardson Hill, Jr., dean of the medical college, and Dr. Walter B. Frommeyer, professor and chairman of the Department of Medicine.

The Ruth Lawson Hanson Chair was established in late July by Mrs. Hanson, in memory of her husband, the late Victor H. Hanson, to provide support in perpetuity for a professor of medicine with interests in the field of diabetes and metabolic diseases. Interest from an initial investment of \$500,000 will provide the support.

In announcing the appointment of Dr. Boshell, Dr. Hill and Dr. Frommeyer said, "The committee of academicians responsible for selecting the appointee unanimously nominated Dr. Boshell for this important position. Their decision reflects complete confidence in Dr. Boshell's ability and potential for providing new knowledge in the field of diabetes and metabolic diseases. Dr. Boshell's contributions to diabetes research, teaching, and treatment are widely recognized by members of the medical profession.

"The Hanson Chair will enable Dr. Boshell and the Medical Center to continue the already excellent work now underway in diabetes, and will contribute immeasurably to the search for cause and cure of diabetes."

Mr. Victor Hanson, late owner and publisher of the *Birmingham News*, died of coronary occlusion in 1945. He had been a victim of diabetes mellitus for many years. Mrs. Hanson assumed his role as chairman of the Board of the *News*, remaining in that position until the paper was sold 12 years later.

Mrs. Hanson has long been a supporter of the Birmingham Lay Diabetes Society, Camp Seale Harris for diabetic children, and the Diabetes Trust Fund.

YWCA Sets Policies on Sex and Health

Two key medically-based policies affecting millions of young Americans were adopted by the recent Boston convention of the Young Women's Christian Association. Officials of the YWCA said

that the policies relate to sex values and health.

In the pronouncement on sex values, the YWCA urges members to face frankly current sex attitudes and practices in our culture and to develop an understanding of the nature of the problems, true meaning of sexuality and its responsible use drawing upon Judeo-Christian insights, and to make responsible decisions about sex.

YWCA officials also said that renewed emphasis on total health for young women was being sought by the association. The program is aimed at helping members to gain both knowledge and basic skills necessary for enjoying the highest standards of physical, mental, and social well-being.

Special attention is being given under the program to education on nutrition, smoking and health, alcoholism, and misuse of drugs.

Steelworkers Get 'Usual and Customary' Coverage

Blue Shield has moved to the forefront among insurance and prepayment plans with a program of "usual and customary" reimbursement for medical services rendered to 1.5 steelworkers and their dependents. The new national contract grew out of discussions among the companies making up Big Steel, the steelworkers union, and the National Association of Blue Shield Plans.

William E. Ryan of Chicago, vice president of NABSP, said that "to a great extent, the future enrollment efforts of all plans will be made easier or more difficult, depending upon the degree of success of Blue Shield plans in providing these new benefits to steelworkers within the contract framework negotiated."

Ryan said that these factors would govern the program and payments to physicians:

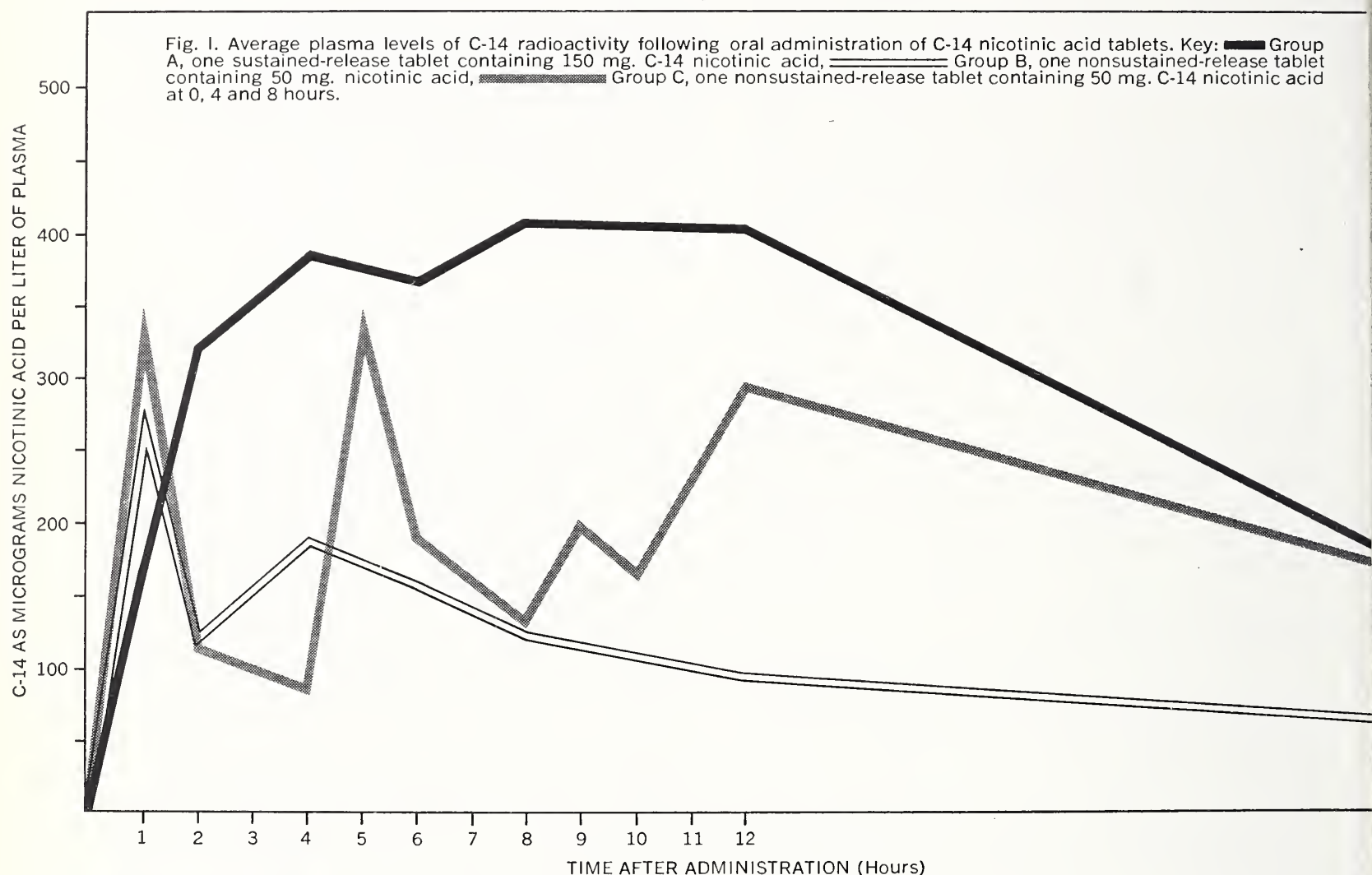
—The usual fee which the individual physician most frequently charges to the majority of his patients for a similar service or medical procedure,

—The customary range of fees charged in the particular locality by most physicians of similar training and experience for performance of a similar service or procedure, and

—Unusual circumstances or complications requiring additional time, skill, and experience in connection with the service or procedure.

Host plan for the steelworkers program is Pennsylvania Blue Shield. As in all national contracts, other Blue Shield plans will handle service on claims wherever there are steel operations involving the union. Ryan said that Pennsylvania Blue Shield has begun work with other plans, so that

Sustained circulatory, respiratory and cerebral stimulation for the



(fewer absent doses by
absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-

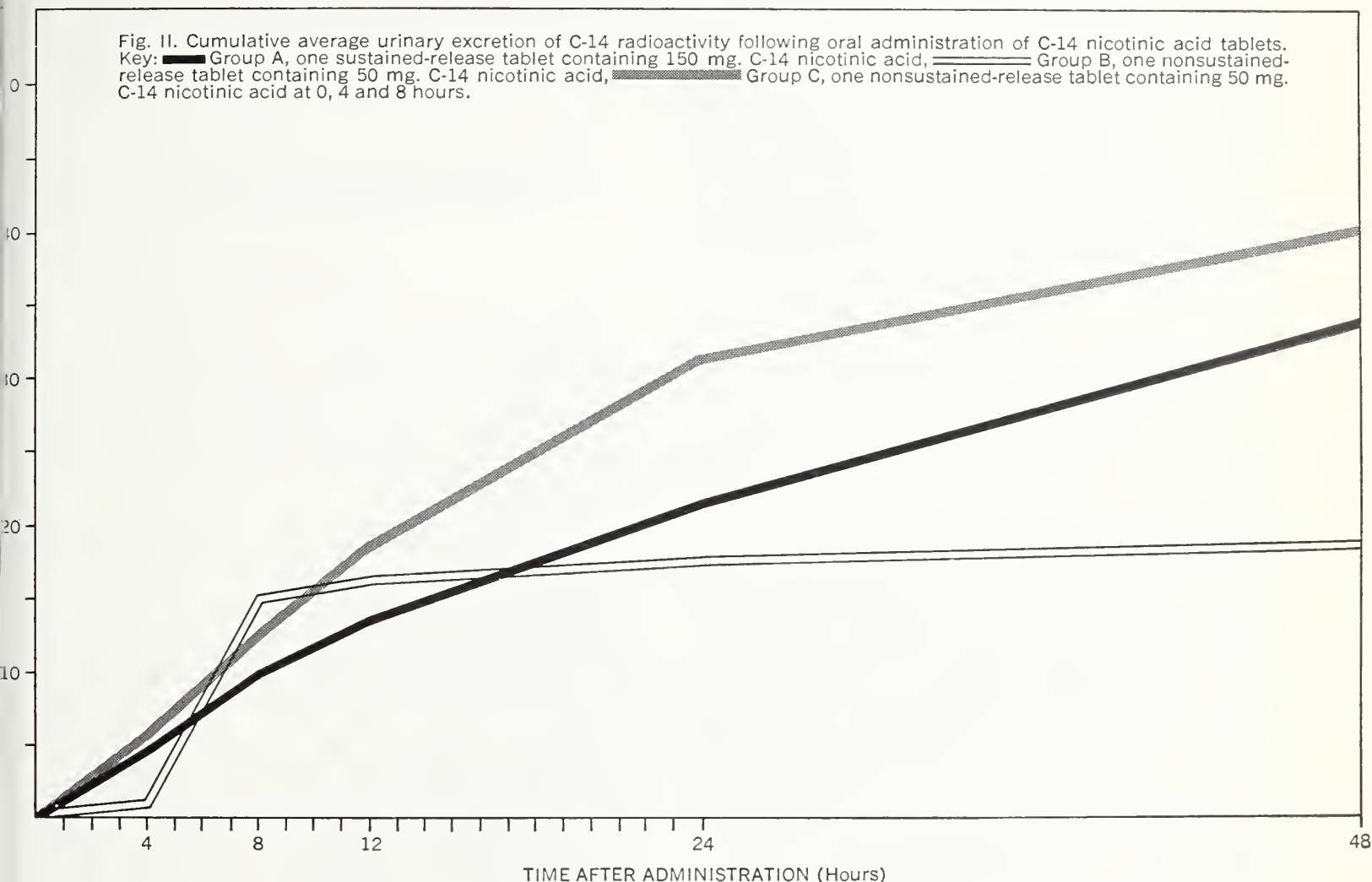
mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." All cerebrovascular circulation is complemented by peripheral tetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate signs of senile confusion. Patients become more alert

ed and debilitated

Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: — Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, — Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, — Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.



s confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, lethargy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylentetrazol therapy, at an economical price. Dosage is only one tablet every 12 hours.

Contraindications: There are no known contraindications.

Precautions: Exercise caution when treating patients with a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. 56:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. 11:617 (July) 1960.

"First with the Retro-Steroids"
PHILIPS ROXANE LABORATORIES
 Division of Philips Roxane, Inc., Columbus, Ohio
 A Subsidiary of Philips Electronics and
 Pharmaceutical Industries Corp.

Geroniazol[®] TT

nicotinic acid 150 mg., pentylentetrazol 300 mg.
 Tempotrol[®] Time Controlled Tablet

proper and prompt service can be given claims, whether in California, Pennsylvania, Alabama, or elsewhere.

He said, "If every plan performs at its best for this account, new areas of enrollment will undoubtedly be open for Blue Shield in the future."

In addition to the concept of compensating the physician in full at his usual and customary fee for services rendered, the program also covers dependents of steelworkers and dependent children up to age 25 and physically and mentally handicapped children of any age. Coverage extends into as much as 12 months of consecutive layoff after two years' participation in the program. The specially tailored umbrella even covers maternity services for unwed daughters of enrollees, Ryan said.

AMA Sets Miami Beach Trauma Symposium

The application of the concepts of daily emergency medical care to the disaster situation will be analyzed at the First Biennial Symposium on the Management of Trauma and Disaster Medical Problems in Miami Beach, Nov. 10-11, 1967.

Sponsored by the American Medical Association's Committee on Disaster Medical Care of the Council on National Security, the two-day symposium will be held at the Carillon Hotel.

Two general sessions, one workshop period, and a panel discussion covering identical subjects—shock and ventilatory dysfunction, fractures, soft tissue and vascular injuries, burns, cardiopulmonary injuries, injuries to the brain and spinal cord, and abdominal injuries—will be offered to the conferees.

The workshop period is designed so the individual physician may present case histories from his own practice of complications arising from trauma to a team of experts for discussion.

Capt. Theodore H. Wilson, Jr., M.C., U.S.N., Chief of Surgery at the Naval Hospital in Bethesda, Md., will address the opening day luncheon on the subject, "The Essence of Sorting the Acutely Injured." Saturday's luncheon speaker will be Dr. Oscar P. Hampton, Jr., of St. Louis, Chairman of the Committee on Trauma of the American College of Surgeons, discussing "Observations on Care of the Wounded in Viet Nam."

Dr. Milford O. Rouse of Dallas, AMA president, will examine "Disaster Medical Care—AMA's Role" during Saturday afternoon's closing session.

Among the other physician speakers are: Drs. Truman G. Blocker, Jr., executive director and dean of the University of Texas Medical Branch, Galveston; John M. Howard, professor of surgery, Hahnemann Medical College and Hospital, Philadelphia; Curtis P. Artz, chairman of the Department of Surgery, Medical College of South Carolina, Charleston; Preston A. Wade, professor of clinical surgery, Cornell University, Ithaca, N. Y.

AAP Honors Michigan Surgical Pioneer

The American Academy of Pediatrics has selected Dr. Cameron Haight, professor of surgery, University of Michigan Medical School, and surgeon-in-charge, Section of Thoracic Surgery, University of Michigan, to receive the AAP's 1967 William E. Ladd Medal.

The award is given by the Academy's Section on Surgery to honor outstanding accomplishments in pediatric surgery.

Dr. Haight will receive the award during the AAP's annual meeting in Washington, D. C., Oct. 21-26, for his outstanding contributions in solving the problems associated with esophageal atresia and tracheo-esophageal fistula.

Dr. Haight performed the first successful one-stage operation to correct this condition.

A native of San Francisco, Calif., Dr. Haight received the A.B. degree from the University of California in 1923, and the M.D. degree from Harvard Medical School in 1926.

Dr. Haight was a surgical intern at Peter Bent Brigham Hospital, Boston, Mass., from 1926-28. From 1928-31, he took surgical assistantships and residencies at Yale University Medical School, and New Haven Hospital.

Dr. Haight joined the medical staff at the University of Michigan in 1931 as an instructor in surgery, and became professor of surgery in 1950.

He is a member of several medical organizations including the American Association for Thoracic Surgery, American College of Surgeons, the American Heart Association, and the American Medical Association. In 1954, he became surgeon-in-charge, Section of Thoracic Surgery, University of Michigan Medical School.

Dr. Haight was president of the American Association of Thoracic Surgery from 1956-57.

ADA Classifies Genetic Diabetes

The Committee on Professional Education of the American Diabetes Association has published a classification of genetic diabetes mellitus.

Since this is the first such report issued by the association it should become a decisive aid to communication among physicians treating diabetes, between them and their patients, among those doing clinical research and to those teaching the subject.

The text of the report follows:

A classification of genetic diabetes mellitus based on abnormalities of carbohydrate metabolism is given below. Progression or regression from one stage to the next may never occur, may proceed slowly over many years or may be very rapid. This classification does not consider the presence or absence of vascular disease, for patients with minimal glucose intolerance or even normal tolerance may have angiopathy.

Overt Diabetes Mellitus: This is frank diabetes, either of the ketosis-prone or ketosis-resistant type. Fasting hyperglycemia is present. Symptoms of hyperglycemia and glucosuria may be present. A glucose tolerance test is not required for diagnosis.

Chemical or Latent Diabetes: This is asymptomatic diabetes. The fasting blood glucose level may be elevated but is usually normal and the postprandial level is frequently elevated. Oral or intravenous glucose tolerance tests performed in the absence of "stress" give results in the ranges accepted for diabetes.

Suspected Diabetes Mellitus (Including "Stress" Hyperglycemia): Persons who have temporary carbohydrate intolerance in certain physiological or pathological situations should be suspected of having diabetes mellitus, particularly when there is a family history of diabetes. Symptoms due to severe hyperglycemia occurring during periods of "stress" should be regarded as representing overt diabetes until proved otherwise. Asymptomatic or symptomatic derangement of carbohydrate tolerance should be re-evaluated after total recovery from the "stress." In particular, impaired carbohydrate tolerance in the following situations requires long-term evaluation:

Pregnancy: The term "gestational diabetes" in-

dicates the presence of abnormal glucose tolerance which reverts to normal following delivery. In these individuals follow-up studies have revealed a high risk of development of diabetes. (Diabetes should also be suspected in a woman whose obstetrical history includes large babies, unexplained abortions, fetal deaths, neonatal deaths, or hydramnios.)

Obesity with abnormal glucose tolerance which returns promptly to normal with moderate weight loss.

Infections, trauma, vascular accidents, burns, impaired nutrition, and severe emotional disturbances.

Treatment with pharmacologic agents, such as corticosteroids or thiazides.

Endocrinopathies such as acromegaly, Cushing's syndrome, thyrotoxicosis, and pheochromocytoma. (Diabetes must also be suspected in elderly subjects without symptoms and signs of the disease but with a glucose tolerance test which in younger individuals would be considered abnormal.)

Prediabetes: Prediabetes is a term applied to the period of time prior to the onset of identifiable diabetes mellitus (overt, chemical or latent). This is a conceptual term identifying the interval between fertilization of the ovum and the demonstration of impaired glucose tolerance in an individual predisposed to diabetes on genetic grounds but presently exhibiting a normal glucose tolerance. It cannot be diagnosed with certainty in the current state of our knowledge except in the nondiabetic identical twin of a diabetic patient and possibly in the offspring of two diabetic parents.

UMC Class of '71 Is Largest Admitted

A second enlarged freshman class of 85 students was admitted to the University of Mississippi School of Medicine for the current session, according to Dr. Robert E. Carter, dean and director of the medical center. The newly admitted Class of 1971, most of whom received their premedical training in Mississippi institutions of higher learning, represents 14 universities and colleges.

Dr. Carter said that accepting progressively larger classes is part of UMC's effort to expand all of its training programs for the health professions as rapidly as is consistent with the maintaining of quality education in order to meet the needs of the state.



"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"



The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP



PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis

AAP Slates Annual Meet at Washington

In-depth examination of new developments in pediatrics, care of children's burns in the home, new child learning techniques, and pediatric manpower problems is on the agenda for the 36th Annual Meeting of the American Academy of Pediatrics at Washington, Oct. 21-26, 1967.

Academy officials forecast that 4,500 pediatricians, families, and guests will attend the meeting which will be headquartered at the Washington Hilton Hotel. The divergent scientific program will offer essays, 24 round table discussion groups, 11 seminars, and a variety of scientific and technical exhibits.

Supplementing general scientific presentations will be Oct. 21 and 22 meetings of the Academy sections on allergy, anesthesiology, cardiology, child development, diseases of the chest, surgery, and urology.

The annual business meeting will be conducted on Oct. 25 when Dr. George B. Logan of Rochester, Minn., is installed as 1967-68 president of the Academy.

Dr. Land Is New Title XIX Commissioner

A former practicing family doctor in Fort Wayne, Ind., has been named to head up the Title XIX program by Secretary John Gardner of the Health, Education and Welfare Department.

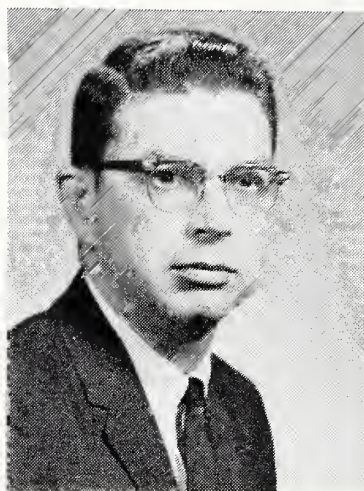
Dr. Francis L. Land was promoted to Acting Commissioner of the Medical Services Administration of the newly-created Social and Rehabilitation Services agency in a sweeping reorganization recently announced by Secretary Gardner. Dr. Land, with HEW for a year, had been chief of the Medical Services Division in the Welfare Administration, Bureau of Family Services.

Dr. Land, 47, was in private practice in Fort Wayne 13 years prior to moving to Washington in 1966. He is a graduate of Indiana University Medical School. He served in the Air Force in World War II and currently is a major general in the Air Force Medical Corps reserve. He was vice president of the American Academy of General Practice his last year in practice and served three years on the Academy's Board of

Directors. He still serves as adviser to the Academy's Committee on Family Health Care Services. Dr. Land also is a member of the Council on Medical Education of the American Medical Association and is a past president of the Indiana Academy of General Practice.

SBH Designates Two New Division Chiefs

Two new division directors within the Mississippi State Board of Health have been named, according to Dr. A. L. Gray of Jackson, executive officer. Dr. Steven L. Moore has succeeded Dr. John A. Milne as director of the Division of County Health Work, and Mr. Joe D. Brown has been elevated to the post of director of the Division of Sanitary Engineering, succeeding J. E. Johnston.



Dr. Moore

Dr. Moore served as a county health officer for four years and received the Master of Public Health degree from Harvard University in 1963. He served a residency of two years in the division which he now heads and was named its assistant director in 1965. He had served in that capacity until his recent promotion.

Mr. Brown is both a registered professional engineer and a registered sanitarian. He first joined the sanitary engineering staff of the State Board of Health in 1957 after having served two years as public health district engineer with headquarters in Greenwood. In 1966, he was named assistant director of the state division.



Mr. Brown

In addition to the bachelor's degree in engineering, Mr. Brown also holds the master's degree, and he has had special postgraduate studies in his professional field at Vanderbilt University.

There are 24,300* undetected diabetics in Mississippi

Most of these are probably among patients over 40; the overweight; relatives of diabetics, and mothers of large babies. By the time polyphagia, polyuria, polydipsia, pruritus or other overt symptoms of diabetes appear, damage may have been done that could have been minimized. DEXTROSTIX® gives you a reliable blood-glucose estimate in 60 seconds.

Why Wait?



*Based on Statistical Report, U.S. Dept. Commerce, ed. 86, and Fisher, G. F., and Vavra, H. M.: Pub. Health Rep. 80:961 (Nov.) 1965.

Note: DEXTROSTIX is not meant to replace the more precise analytical laboratory procedures such as needed in glucose tolerance testing.

AMES COMPANY, Division Miles Laboratories, Inc., Elkhart, Indiana 46514 428R67



Ames

ACS, PHS Training Film Is Available

A 40-minute color film, "Hands of Action," depicting recommended procedures for handling a number of emergency health care situations is now available on a free loan basis from the Public Health Service.

The film, designed for use by instructors conducting training programs for operators of emergency vehicles, outlines recommended procedures for emergency handling of blocked airways, bleeding, open wounds, and broken bones.

The film depicts a physician, using layman's language, instructing ambulance attendants. He describes the nature of the respiratory and circulatory systems, dangers of infection, and the types of broken bones attendants might encounter. Demonstrations that focus on both real and simulated injuries emphasize proper procedures to enable the attendant to transport the patient without further injury.

The 16 mm. optical sound film was produced by the Trauma Committee of the North Carolina

Chapter of the American College of Surgeons under a Community Health Services project grant from the Public Health Service.

Dr. Joseph K. Owen, Acting Chief, Emergency Health Services Branch, Division of Direct Health Services, said that the film is available on a free loan basis from the National Medical Audiovisual Center (Annex), Chamblee, Ga. 30005, from State Departments of Health, and from Regional Program Directors of the PHS Injury Control Program.

Philips Roxane Will Market Generic Drugs

A new concept in the marketing of generic pharmaceuticals has been introduced to the drug industry with the formation of Alliance Laboratories, Inc., a joint venture consisting of Philips Roxane Laboratories and a group of fourteen major independent drug wholesalers.

The concept is based on the manufacturing and distribution of assured quality generic pharmaceuticals at economical prices to fill the need created by the current demand for "generic prescribing." It also acknowledges the important role of retail and hospital pharmacists in the selec-

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205-836-7201

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 42 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL:

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

tion of effective and inexpensive pharmaceuticals.

To achieve its objective, Alliance utilizes existing manufacturing and distribution facilities. The manufacturing facility will be Philips Roxane Laboratories, a wholly-owned subsidiary of Philips Electronics and Pharmaceutical Industries Corp. (ASE).

Philips Roxane developed the first retro-steroid and the first measles vaccine grown and incubated on canine renal tissue. It recently introduced the first hospital liquid unit dose program in the industry. The Philips Roxane production, product development, and quality control resources will be used to manufacture a broad line of Alliance quality generic pharmaceuticals which will be stocked on a regular basis.

Distribution will be handled by the fourteen drug wholesalers who maintain 39 distribution points from coast to coast. Their salesmen regularly contact retail pharmacists, hospitals, nursing homes and institutions.

Alliance Laboratories, headquartered in Columbus, Ohio, introduced its line of generic pharmaceuticals in September. Alliance also plans to investigate the possibility of marketing other products compatible with the distribution know-how and techniques of the drug wholesalers who are participants in the joint venture.

Gerald C. Wojta, president of Philips Roxane Laboratories, will also serve as president of Alliance.

"When a physician prescribes generically," stated Mr. Wojta, "the decision as to which company's product to use rightfully rests with the qualified pharmacist who exercises his professional judgement in making his selection. This decision is largely reflected by the pharmacist's confidence in product quality and availability."

Senate Confirms Two New NLM Regents

The Senate has confirmed President Johnson's nomination of two new members to the Board of Regents, National Library of Medicine, U. S. Public Health Service.

The new members are Robert Higgins Ebert, M.D., Ph.D., Dean of the Harvard Medical School, Boston, Mass., and Frederick Herbert Wagman, Ph.D., Director of the University of Michigan Library, Ann Arbor. They have been appointed to replace retiring members Herman H. Fussler, Ph.D., and William N. Hubbard, Jr., M.D.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habitation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.

ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.

MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

AMA Library Is Among Nation's Best

A young intern, hoping to practice medicine in East Africa after receiving his license, wants to correspond with medical people already practicing there and needs names and addresses. He writes to the American Medical Association Archive-Library for assistance.

A doctor, well established in a practice he has maintained for twenty years, finally gets the opportunity to take his wife on their dream tour of Europe. They will be in Switzerland in July. He wonders if there will be any medical meetings he can attend in Switzerland during their visit. He writes to the Archive-Library for information.

A general practitioner has a patient, a 17-year-old girl, who is planning to attend a year of school in Guatemala. She is a potential surgery patient. He is concerned about the type and quality of medical service available in the region. He writes to the Archive-Library for help.



Almost lost in the stacks of the AMA Archive-Library, a lone physician browses one of the nation's best book collections.

You could be any one of these AMA members who benefit from the services of the AMA Archive-Library, just one dividend of your AMA membership. The Archive-Library services to members include conducting medical literature searches and compiling bibliographies free of charge. Another available aid of great value, the Library's photocopy service, is also free to you. Any article from any journal to which the Library has access can be copied and sent to you for your files.

The Library handles from 1,500 to 1,800 re-

quests similar to those above for information and publications from physician members every month.

Questions and requests may range from the treatment of chlorine inhalation or statistics on human longevity to the latest treatment for Scleroderma or Raynaud's Disease to plans for the mass treatment of large numbers of burned patients.

The AMA Archive-Library upholds the traditional role of the medical library as an adjunct to the postgraduate education of the physician in practice, but it is even more than a library. It is a complete information center.

As a national medical society library, the Archive-Library is able to provide services not normally available on the local level. A more complete collection of materials allows the Library to supplement local library service. In addition, several special subject collections cover thoroughly such topics as international health, history and the sociology and economics of medicine. The AMA's collection on the sociology and economics of medicine is the best in the world. It contains almost all the English language publications and includes opinions reflected in mass media as well as in scholarly works.

At the core of the Library is a collection of current medical publications. Today, 2,200 journals, including the JOURNAL MSMA, are received on a regular basis. This is twice the number contained in any average medical school library. These represent all the major publications in medicine and the allied sciences. In addition to the periodicals, the Library contains 40,000 books. This makes the Archive-Library one of the most complete current medical libraries you will find any place.

Of course your needs and requests determine the Library's content. The quantity and type of periodicals and reference books contained in the Library are guided by your requirements and those of the AMA staff.

Perhaps the one thing above all others which sets the AMA medical Library apart and makes it a true information center is the availability to the Library staff of a unique resource unavailable at many other medical libraries—the professional staff members of the AMA's 20 scientific departments. "The professional staff is here and we can use them," Susan Crawford, director of the Archive-Library, says. "Few other libraries have this type of consultation available. When a doctor writes to us and wants medical opinion or judgment, his question is referred to a consultant on the AMA staff, or to one of many specialists in the country, through the Questions and Answers Department of JAMA."

Such referrals are made in numerous areas such as medical physics, cardiology, psychiatry and drug therapy. Physicians on the AMA staff evaluate information for you before it is ever delivered.

For example, a question on drugs which requires clinical and pharmacological judgment is routed to the AMA's Department of Drugs. The staff in that department can research all available material on the subject and isolate the exact information you need.

The 26 members of the Archive-Library staff will go to great lengths to give you the information you need, and they are fully qualified to do so. They are especially trained to communicate with physicians—they speak your language. Half of the staff have graduate degrees in various areas and many have two masters degrees, one in library science and another in a chosen field such as economics, history or the biological and social sciences.

If you are a history buff, one of the more interesting areas of the Library is the Archive Section which houses documents and artifacts on the history of American medicine and the AMA. If you are at all interested in the progress of organized medicine, in the AMA or in tracing your ancestry or doing other historical research, the Archives hold a wealth of information for you.

The Library is always improving and enlarging its facilities. The last addition to the services was the International Health Section which has made it possible for all of the Library services to follow you, as a member of the AMA, wherever you go, whether it be the remote mountain stretches of West Pakistan, the rain forests of Brazil or a center of civilization such as Paris.

If you are planning an overseas trip or sabbatical, to set up practice or to attend a meeting or congress, the Library can give you all the information you need on foreign medical organizations, hospital and medical facilities in various countries, living conditions, what you should bring and the locations of the nearest American physician in any country.

The staff can also furnish you with information on a comprehensive and up-to-date listing of medical meetings outside the United States. After you are situated abroad the Library will continue to provide you with research facilities and photocopy services on specific medical subjects just as they did when you were stateside.

Any of the services of the Archive-Library are available to you by mail, telephone (312-527-1500), TWX (910-221-0300), telex (254-020) or in person. Library hours are 8:30 a.m. to 4:45 p.m. Monday through Friday.

AMA Names New Viet Nam Chief

Dr. Lawrence A. Smookler of San Francisco has been named field director of the American Medical Association's Volunteer Physicians for Viet Nam program.

The AMA administers the program, under contract, for the United States Agency for International Development (AID).

"The AMA-AID volunteer program is one of American medicine's most significant undertakings," Dr. Smookler stated in accepting the position. "During my own service as a volunteer last year, I realized how much American physicians can contribute to the Vietnamese civilian population and how much they can learn in return about the health problems of developing areas of the world."

Announcement of Dr. Smookler's appointment was made by Dr. F. J. L. Blasingame, executive vice-president of the American Medical Association, and Dr. Charles H. Moseley, director, AMA Department of Governmental Programs.

"Dr. Smookler participated outstandingly as a volunteer physician in South Viet Nam last year, and supported the program in many ways after his return to the United States," said Dr. Moseley. "We are fortunate to obtain a man with his experience and interest for the Field Director position."

Dr. Smookler replaces Dr. Malcolm E. Phelps of El Reno, Okla., who recently retired as field director. Dr. Phelps was elected vice-president of the AMA at the association's 116th Annual Convention at Atlantic City in June.

As field director, it will be Dr. Smookler's task to coordinate the volunteer physician program with health care needs of the Vietnamese civilian population.

The volunteer physician program is part of the overall program of U. S. medical assistance to South Viet Nam. Started in July, 1965, in response to a plea from the South Vietnamese government, its purpose is to help the war-torn little nation provide health care for 16 million civilians. Of the approximately 1,000 Vietnamese physicians, about 750 are in military service and generally unavailable to the civilian population.

American volunteer physicians serve for two months in Vietnamese civilian hospitals throughout South Viet Nam, principally in provincial towns. About 32 volunteers are in South Viet Nam at all times, with 16 replaced every month. Volun-

ORGANIZATION / Continued

teers receive only transportation expenses and a living allotment of \$10 a day.

More than 300 physicians have participated since the program's inception.

Dr. Smookler will be returning to a country where dozens of villages and thousands of villagers knew him as the American doctor who came to them by boat.

While serving under the AMA volunteer program in 1966, Dr. Smookler started a program of field trips from his assigned hospital at Long Xuyen in the upper Mekong River delta region. In assault boats lent by the U. S. Navy or the South Vietnamese Army, he visited villages on the banks of the Mekong to conduct health examinations and treat injuries or disease. He visited a leprosarium that had been without professional medical attention for many months, made several trips to an orphanage that had been burned by the Viet Cong and managed to vaccinate 350 children against cholera, and he dressed wounds and treated ill Vietnamese soldiers at river outposts.

He undertook the field trips for two principal reasons: to attempt to reach persons who might never have made a long journey to the hospital,

and to assist U. S. military medical teams in relieving serious health conditions created among the civilian population by the annual Mekong River monsoon flood.

Clinical Conclave Offers Four PG Courses

Physicians will have an opportunity to continue their postgraduate medical education at courses offered during the American Medical Association's Clinical Convention at Houston, Nov. 26-29.

The postgraduate program, expanded to four subjects this year, offers courses in "Fluid and Electrolyte Balance," "Oncology," "Cardiovascular Disease," and "Obstetrics and Gynecology."

Leading medical educators will lecture at the courses, which will consist of three half-day sessions each.

The courses will be limited to 200 persons each; the first 200 who register on arrival in Houston will be given tickets. There will be a special Postgraduate Course registration booth adjacent to the general registration area in Astro Hall.

Courses will begin promptly at 9 a.m. and 2 p.m.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761



"All Registered Nurses are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards. Therefore, all registered nurses are alike.

That's nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet dis-

integration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all registered nurses aren't alike, either.



PHS Relocates Urban, Industrial Health Center

The National Center for Urban and Industrial Health, an arm of the Public Health Service charged with eliminating health hazards associated with urban living, has established permanent headquarters in Cincinnati, Ohio.

The center, one of the major operating units of the service's Bureau of Disease Prevention and Environmental Control, was created in January as part of a general reorganization of the Public Health Service.

Establishment of the center in Cincinnati brings together in one location numerous Public Health Service programs involving research, training, and technical and financial assistance in such environmental health fields as solid waste management, prevention of occupational illness, control of injury hazards, milk and food sanitation, health implications of the use of water and sea resources, and environmental engineering.

One center activity, the Arctic Health Research Laboratory, will continue to function at its new facility adjacent to the University of Alaska at Fairbanks.

The move of the national center from temporary headquarters in the Washington area to rented facilities in Cincinnati is the first step in a program that will eventually find the center housed in permanent facilities on the campus of the University of Cincinnati.

Congress on Air, Car Accidents Is Set

The third triennial congress of the International Association for Accident and Traffic Medicine, which consists of physicians and members of other scientific disciplines concerned with accident and traffic problems, will be held at the Americana Hotel, New York City, May 29-June 3, 1969.

According to Dr. Milton Helpert, president of the association, the chief purposes of the congress are to focus much-needed professional attention on the various issues involved in motor vehicle accidents and to some extent airplane accidents; to provide an opportunity for scientists to report on recent research and other work in this field; and to increase even further current

public interest in traffic safety and related areas.

If even modest strides are made toward these ends, Dr. Helpert said, he foresaw a significant expansion of research activity in the field and a greater awareness by physicians and others of traffic accident problems.

According to Dr. Helpert, a planning committee of leading authorities in the field has already been formed. A program committee will be established in the near future.

Hudson Is Named New RMP Executive

Charles R. Hudson of Jackson has assumed new duties as full time assistant to Dr. Guy D. Campbell who is coordinator of the Mississippi Regional Medical Program. Hudson had served until his new appointment as assistant director of the University Hospital.

The Regional Medical Program is headquartered at and under the supervision of the University Medical Center. A broadly based advisory committee on which the state medical association is represented is guiding program development.

Utilization Review Meet Is Planned

Trends in hospital utilization and review programs will be discussed in depth at the Second National Conference on Utilization Review sponsored by the American Medical Association.

The one-day meeting, planned by the AMA Council on Medical Service and its Committee on Medical Facilities, will be held Saturday, Nov. 25, 1967, in the Shamrock Hilton Hotel, Houston, Texas. This conference will immediately precede the AMA's Clinical Convention, Nov. 26-29.

Approximately 1,000 physicians, hospital administrators, and allied health representatives are expected for the conference which is entitled "Utilization Review—Problems and Promise." Due to increasing interest in hospital utilization programs and procedures, the theme is designed to provide more definitive data on utilization trends and on more effective and efficient utilization review methods. Also to be discussed will be the roles of governmental agencies, fiscal intermediaries, and the medical profession in utilization review.

Volume VIII
Number 11
November 1967



- EDITOR
WILLIAM M. DABNEY, M.D.
- ASSOCIATE EDITORS
GEORGE H. MARTIN, M.D.
THOMAS W. WESSON, M.D.
- MANAGING EDITOR
ROWLAND B. KENNEDY
- EDITORIAL CONSULTANT
BETTY M. SADLER
- PUBLICATIONS COMMITTEE
LAWRENCE W. LONG, M.D.
Chairman
B. B. O'MARA, M.D.
WILLIAM E. LOTTERHOS, M.D.
and the Editors
- THE ASSOCIATION
TEMPLE AINSWORTH, M.D.
President
JOSEPH B. ROGERS, M.D.
President-elect
WALTER H. SIMMONS, M.D.
Secretary-Treasurer
WILLIAM E. LOTTERHOS, M.D.
Speaker
JAMES L. ROYALS, M.D.
Vice Speaker
ROWLAND B. KENNEDY
Executive Secretary
CHARLES L. MATHEWS
Assistant Executive Secretary

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

CONTENTS

ORIGINAL PAPERS

Carcinoma of the Cervix
in Pregnant Patients 647 WARREN C. PLAUCHE, M.D.

Temporary Artificial
Pacing of the Heart 654 THOMAS M. BLAKE, M.D.,
ROBERT A. JOHNSON, M.D.,
and EDMUNDO POMBO, M.D.

Aspects of Thyroid
Disease 657 HERBERT G. LANGFORD,
M.D.

SPECIAL ARTICLES

Radiologic Seminar
LXVII 652 PAUL H. MOORE, M.D.

EDITORIALS

Abortion: Issue of the
Shadows, Dilemma of
Antiquity 661 New Look at Old Issue

Self-Medication?
Well, Hardly Ever 665 Double Doser

Physicians Should Serve
as Hospital Trustees 665 The Call Is Clear

Quality Counts, So
Count the Chairmen 668 Gavels in Mississippi

THIS MONTH

The President
Speaking 660 There's No Tomorrow

The Literature 673 New Books Reviewed

Medical Organization 675 Utilization Review

Trustees, Councils 693 1967-68 Incumbents

Meetings 25 Society Circuit

Synirin®

ACETYSALICYLIC ACID (ASPIRIN)..... 5 GR.
 *PENTOBARBITAL (ACID)..... 1/8 GR.

**Warning: may be habit-forming*

Synirin provides prompt barbiturate potentiation of aspirin without limiting the therapeutic usage of aspirin. Both pentobarbital and aspirin begin their action together promptly and last 4 or 5 hours. There is no accumulation.

LITERATURE AND CLINICAL SUPPLY AVAILABLE TO PHYSICIANS

*SYNIRIN is another
 pharmaceutical achievement*

WM. P. POYTHRESS & CO., INC.

RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



ACR Refutes Radiation Death Charge

Many Americans have been alarmed unnecessarily by the statement of a prominent health physicist that "thousands of deaths" are caused annually by radiation exposures from routine diagnostic x-ray examinations, the chairman of the American College of Radiology said.

Dr. Joseph D. Calhoun of Little Rock, Ark. said that there is no known instance in which a routine x-ray examination was found to be fatal to a patient directly because of the radiation exposure involved.

Dr. Calhoun's comment was issued following an assertion that 3,500 to 29,000 deaths a year were caused by radiation damage from diagnostic medical exposure. The claim was made to the Senate Commerce Committee by Dr. K. Z. Morgan, director of the health physics division of the Oak Ridge National Laboratory.

"What was not brought out was that Dr. Morgan's figure was admittedly his own guess and represented a statistical extrapolation of hazy data, rather than actual patient figures," Dr. Calhoun explained. "Even with the qualifications contained in Dr. Morgan's 40-page text, we still dispute seriously many of his conclusions about the relative safety of medical x-ray procedures."

Dr. Calhoun pointed out that no other witness before the Senate group supported Dr. Morgan's assertions. On August 31, Dr. Lauriston S. Taylor of Washington, a physicist and president of the National Council on Radiation Protection and Measurements, told the Senate Committee that Dr. Morgan's claims were "based upon pure speculation, without any clinical facts to support them."

Dr. Antolin Raventos of Philadelphia, chairman of the College's Commission on Radiologic Units, Standards and Protection, pointed out that a recent national survey by the U. S. Public Health Service concluded that medical x-ray uses account for only about half as much exposure as the average American receives annually from natural background sources. The medical exposure to reproductive organs was estimated at 55 millirems and the average background exposure of Americans at 120 millirems per year. Background radiation comes from natural radioactivity in the soil, in cosmic rays from the sun, in food and in body substances.

"Our concern as radiologists for safe uses of x-rays goes back much further than Dr. Morgan's

efforts," he said. "While we have much regard for Dr. Morgan as a physicist, we cannot accept the kind of generalizations that he made in his testimony to the Senate Committee. His omission of the relationship between the natural burden and man-made radiation represents a regrettable distortion.

"There is no conclusive proof that radiation exposures at low levels have caused injury to humans. We all concur that there is a probability that any measurable radiation is more likely to be injurious than helpful. Thus, radiologists have long led efforts to achieve more effective and safer uses of x-rays in medicine and elsewhere. Based on these efforts, we see no cause for the alarmist attitude expressed by Dr. Morgan."

Dr. Calhoun pointed out that the need for diagnostic information by a patient's own physician is the only sound reason for subjecting a patient to an x-ray examination. "We feel a direct responsibility to see that our examinations are done efficiently and safely so that the maximum benefit is attained with the minimum risk to all concerned."

NASA Plan Will Aid Doctors

A booklet addressed to biomedical researchers has been issued by the National Aeronautics and Space Administration describing a plan to stimulate secondary use of space research results in solving medical problems.

Work of biomedical teams of scientists and engineers at three non-profit research institutes under contract with the NASA Office of Technology Utilization is described. Their activities are part of a program to spread knowledge resulting from space research.

The teams work with universities, hospitals and other research institutions to define specific medical problems to which space technology may be applicable. They then search for potential solutions to those problems in aerospace research centers, libraries, and industrial plants. When promising ideas are found, the teams help biomedical workers evaluate them for use in clinics, hospitals, and medical laboratories.

Biomedical researchers who are interested in taking part in the program may write to one of the cooperating research institutes. Copies of the booklet may be obtained from the Technology Utilization Division, Code UT, NASA Headquarters, Washington, D. C. 20546.

removes the mental blur



that clouds vision

SOLFOTON®

Each tablet or capsule contains

PHENOBARBITAL.....16 mg.

(Warning: may be habit forming)

BENSULFOID® (See P D R).....65 mg.

Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.

Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING
WITHOUT PRESCRIPTION

AVAILABLE

Solfoton (yellow, uncoated tablets "P")
100s, 500s, 5000s

Solfoton Capsules (yellow and brown)
100s, 500s, 1000s

Solfoton S/C (sugar-coated beige tablets)
100s, 500s, 4000s

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856

HEALTH CARE COSTS GOING UP!

BE READY with flexible
benefits and services that auto-
matically increase in value as
health care increases in cost.

MAIL COUPON TODAY



BLUE CROSS/BLUE SHIELD



P. O. Box 1043, Jackson, Mississippi 39205

Rush me complete information about your new benefit plan.

- | | |
|---|---|
| <input type="checkbox"/> Individual membership | <input type="checkbox"/> Cancer protection |
| <input type="checkbox"/> Family membership | <input type="checkbox"/> Over age 65 benefits |
| <input type="checkbox"/> Increased benefits (my contract number is _____) | |

(Please print)

NAME _____

STREET _____

CITY _____ STATE _____ ZIP _____

TELEPHONE NO. _____

PLACE OF EMPLOYMENT _____

NOTE: Check here ☐ if you own or manage a business with
five or more employees and wish information about
our Employee Group Plan.

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

November 1967

Dear Doctor:

Congress may yet put a crimp in the free-swinging regional health center program under the Office of Economic Opportunity. In passing the 1967 poverty program amendments, the Senate wrote in a requirement that the poverty director, before establishing any regional or neighborhood health center, must "solicit the comments and recommendations of the principal local medical association in the area."

Further consultation is also required with appropriate federal, state, and local health authorities. If passed by House of Representatives, the restriction would be a strong deterrent to superimposing health care centers on an area with out-of-state personnel.

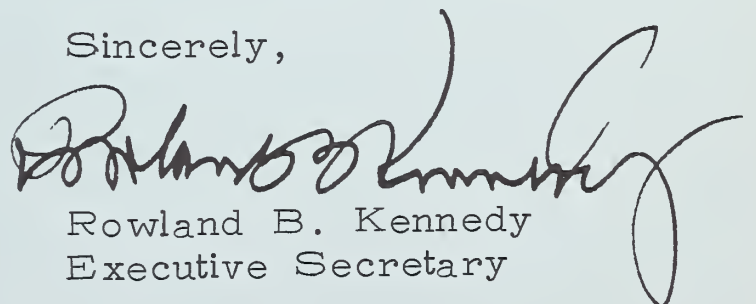
The "radiation death" scare got another boost when a major TV maker was made to withdraw color sets from market. Allegation was that the color sets produced excessive x-rays which were probably harmful to viewers. American College of Radiology has expressed opinion that public alarm over this and other scare releases may lead to federal legislation regulating manufacture of all electronic and radiation devices.

A recent study of divorce laws shows that 28 states grant decrees on basis of "insanity." Most astonishing finding, however, is that six states permit divorce on such grounds without requiring testimony or report from a psychiatrist.

West Virginia's state health department has invoked an antique law to forbid sale of cigarettes to minors. Health Officer N. H. Dyer says that an 1891 law forbidding sale of fags to anyone under 21 will be rigorously enforced. Decision has support of state medical association.

Most medical communities in Mississippi will participate in observance of Diabetes Week, November 12-18. As in prior years, emphasis will be on case finding for hitherto undiagnosed diabetics. Recent studies by Ames Company, major maker of diagnostic agents, shows that there are 24,300 undetected diabetics in Mississippi.

Sincerely,



Rowland B. Kennedy
Executive Secretary



DATELINE - MEDICAL AMERICA

Chiropractors Twist Congressional Arms Over Medicare

Washington - The small-but vociferous chiropractic lobby is doing double duty in the halls of the Senate, trying to get in under Part 1-E of Medicare. A similar effort in the House during consideration of H.R. 12080, Social Security Amendments of 1967, was unsuccessful, but push by the spine punchers in the Senate is a serious effort. It is to be remembered that 96 of the 100 senators come from states with chiropractic licensure.

Deep South VD Rate Soars

Atlanta - The U.S. Public Health Service Communicable Disease Center reports that syphilis rates in the deep South are generally up for 1966 and lead the nation on regional highs. Worst rates per 100,000 population are Alabama with 35.4 and South Carolina with 34.9. Arkansas is lowest with 7.8, while Mississippi is a high median with 22.1. District of Columbia took the trophy with a whopping 61.6 per 100,000.

Keogh Program Is Expected To Grow In 1968

Jackson - Self-employed professional persons will be taking a second look at voluntary retirement plans under the Keogh Act when new and improved tax advantages become effective January 1, 1968. New provisions permit tax-deferred salting away of \$2,500 or 10 per cent of annual gross income. Law also permits additional contributions up to \$2,500 annually on which taxes have been paid, but there are no taxes on earnings and growth until retirement.

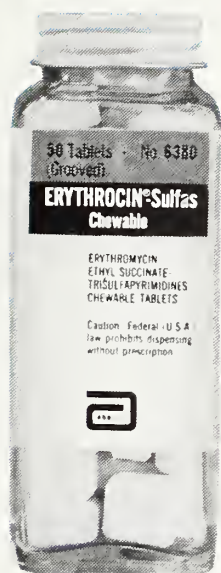
Medicare Enrollment Is Extended, Premiums Will Be Up

Washington - Public Law 90-97 extends initial enrollment period for Part 1-B of Medicare three months to March 31, 1968. Present premium of \$3 from beneficiary and \$3 from government will also apply through extension period. HEW Secretary Gardner has said that rate will go to \$4 each per month in April. Journal MSMA predicted cost rise last September.

Whirlybirds Become Safer

New York - The helicopter, uniquely ugly and magnificently useful, is getting safer, according to studies by the Metropolitan Life Insurance Co. Figures for 1962-65 reflect steady decrease in accident rates and fatalities. Majority of accidents happen to commercial or general aviation rotary wing craft but not those in scheduled air carrier service. Chopper carriers flew 24 million passenger miles in 1966 with only one fatal accident.

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN®-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

1. Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
2. Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701353



Dr. Dorman Chairs WMA Board

Sir Leonard Mallen of Adelaide, Australia, was named president-elect of The World Medical Association, Dr. Gerald D. Dorman of New York City, was re-elected chairman of the Council, and Dr. J. J. Jonchères of Saintes, France, vice chairman, at the council session following the 21st General Assembly held in Madrid, Spain.

Sir Leonard and Lady Mallen issued an invitation to the Delegates to hold their 22nd Assembly in Sydney, Australia, August 5-10, 1968, just preceding the joint meeting of the British and Australian Medical associations in that city.

In summarizing the actions taken by the Council and the 21st World Medical Assembly, Dr. Dorman, a Trustee of the American Medical Association and vice president of the New York Life Insurance Company, stated that the two most important decisions of the Assembly were:

A decision to hold the Fourth World Conference on Medical Education in a European city in 1972, and

Adoption of a resolution on Family Planning stating:

Whereas, population explosion will cause problems of nutrition, and

Whereas, unrestricted population increase may leave large segments of the human race in poverty and without adequate education, and

Whereas, careful planning and foresightedness may meet these problems, and

Whereas, a doctor must always bear in mind the obligation of preserving human life,

Now, therefore be it resolved that the Council recommends that the Assembly endorse family planning and that each national organization study this situation. Family Planning may be assigned to one or other agency, *but the final responsibility is on a voluntary personal basis.*

In the concluding council session, Dr. Jonchères of France urged increased international cooperation between the doctors of the world to insure constant improvement of the standards of health of the peoples of the world.

The secretary general, Dr. A. Z. Romualdez, formerly of the Philippine Medical Association, announced that new councilors included Dr. Derek Stevenson, general secretary of the British Medical Association; Dr. Ronald Winton, editor of the *Australian Medical Association Journal*; Dr. Omar Barreneche of Uruguay, an official of the Pan American Medical Confederation; and Dr. F. Pascual of Manila.



ORIGINAL PAPERS

Carcinoma of the Cervix In Pregnant Patients

WARREN C. PLAUCHE, M.D.

Biloxi, Mississippi

PREGNANCY OFFERS the physician a unique opportunity to examine young women for cervical atypias and malignancies. Finding a case of carcinoma of the cervix in a pregnant patient presents a crisis for both the physician and the patient. As with other problems occurring rarely in an individual doctor's experience, the physician searches the literature for management suggestions. The literature on this subject is voluminous, but, as will be seen, frequently contradictory. Most papers are collections of 20 or so cases from large centers gathered over a period of 20 years or more. This time span precludes matched groups of cases, consistency of therapeutic modalities and constancy of personnel. The efficacy of each type of therapy becomes difficult to assess.

In the early 1950's, a controversy raged in the literature regarding the reliability of cytologic and micropathologic diagnosis in material from the cervix in pregnancy. The regression rate of carcinoma in situ after biopsy has proven to be identical in pregnant and non-pregnant patients.¹ The current opinion is that cervical carcinoma, in situ or invasive, has the same characteristics whether or not the subject is pregnant.¹

A review of the literature regarding the effect of pregnancy on the progression of cervical malignancy yields a dozen papers, mostly of older vintage, of the opinion that pregnancy accelerates cervical cancer.² Several papers indicate that preg-

nancy may decelerate the malignancy's progress. Most recent authors feel that pregnancy exerts no effect on the malignancy unless the patient has delivered through a cervix containing invasive tumor.³

The incidence of carcinoma of the cervix complicating pregnancy is shown in Table 1. Variation is the rule—from 1:25,000 at Margaret

Case finding of carcinoma of the cervix in pregnancy depends on every doctor obtaining Pap smears on each of his pregnant patients and carefully investigating each abnormal smear by cone biopsy, states the author. He reviews the literature and discusses a series of 13 cases. He presents a plan of therapy related to the extent of the disease and the duration of pregnancy at the time of diagnosis.

Hague Hospital to 1:362 at North Carolina Memorial.⁴ All writers on this subject emphasize the roles of early marriage, early childbearing, high parity, multiple sex partners and low socioeconomic status in the pathogenesis of cervical malignancy. Other suspected, but less well correlated factors are venereal diseases, trichomoniasis, and the use of sex steroids. It seems that, having advised early marriage and childbearing as prophylaxis for endometriosis, gynecologists must now contend with an increased incidence of cervical

Read before the Section on Obstetrics and Gynecology, 99th Annual Session, Mississippi State Medical Association, Biloxi, May 15-18, 1967.

malignancies in young women as well as a panicky search for effective contraceptives in the middle marital years, with their attendant problems.

Table 2 presents the cases of carcinoma of the cervix in pregnant patients from our own series—six in situ, seven invasive. One can readily see the frequency of early marriage, early childbearing and high parity in this group. The mean age of our patients is 28.2 years, compared to the mean reported in the literature of 31.1 years for in situ and 33.3 years for invasive malignancy complicating pregnancy. Our mean parity is 5.0, similar to the mean of 5.5 pregnancies reported in the literature.

Pregnant women generally harbor very early stages of cervical malignancy. Case finding therefore depends principally on the assessment of cytologic smears. The cervix should be inspected and Pap smears taken on all pregnant patients at an early prenatal visit, regardless of age or the appearance of the cervix.

SIGNS OF SUSPICION

Abnormal bleeding in mid or late pregnancy should prompt reinspection of the cervix and biopsy of any visible lesion. A suspicious Pap smear, Class III, IV, or V, demands further investigation by biopsy techniques. The most widely accepted biopsy modality is cold-knife conization of the cervix.

A word about conization technique in pregnant patients is pertinent. Vasopressors or Pitressin substances should not be used for hemostasis. The Shiller iodine test is useful to help delineate the extent of dysplastic epithelium to be excised.

TABLE 1
INCIDENCE OF CARCINOMA OF CERVIX
IN PREGNANCY

	<i>Incidence</i>
Margaret Hague (N. Y.)	1:25,000
N. Y. Hospital	1:12,000
Philadelphia Lying In	1:10,000
Chicago Lying In	1: 7,500
Woman's Hospital (N. Y.)	1: 4,200
Univ. of Alabama Hospital	1: 2,800
Boston Hospitals (Kistner)	1: 2,000
North Carolina Memorial	1: 362

Practically speaking, one is doing a cone to diagnose malignancy and rule out invasion. The depth of invasion is of only academic importance. Tu-

mor invasion can be accurately determined with minimal blood loss by a "radial shave-biopsy," a shallow cone avoiding the large vessels of the deeper stroma. We have found that modified Sturmdorf sutures placed anteriorly and posteriorly yield excellent hemostasis and cleaner healing with less distortion of the cervical architecture.

TABLE 2
CURRENT SERIES: CANCER OF CERVIX IN
PREGNANCY. AGE, GRAVIDITY, STAGING

	<i>Name</i>	<i>Race</i>	<i>Age at Dx.</i>	<i>Gravidity</i>	<i>Age at Marriage</i>	<i>Age at 1st Preg.</i>
Stage O	EW	W	35	4	23	24
	ER	W	41	8		19
	FR	W	21	2	16	17
	KC	W	28	6	16	17
	PR	W	23	4	15	15
	KR	W	21	5	16	16
	Median		28.4			
Stage I & II	WS	W	24	5	15	17
	MR	W	33	3	18	21
	LR	C	29	3		19
	BB	W	30	5	16	17
	CP	C	35	10	19	20
	EB	C	27	7		17
	WW	W	19	3	14	14
Median Literature			28.0	5.0	16	17
			33.3	5.5		

Table 3 presents the common complications of conization of the pregnant cervix. The recurring problems are hemorrhage and/or abortion each in 5-10 per cent overall incidence. These figures lend support to Dr. Karl Bolten's efforts to develop accurate but less traumatic biopsy techniques using culposcopically guided spot biopsies of the cervix.

MODES OF THERAPY

Problems of therapy center around cases with invasive carcinoma. The two available therapeutic modes, surgery and irradiation, each have their proponents. Irradiation has the advantages of wide applicability, ease of accomplishment, and low mortality. Surgical advocates point out the advantages of conservation of ovarian function in young patients, accomplishment of definitive therapy at a single sitting, and less alteration of vaginal architecture and function. The cure rates for each modality are comparable, as may be seen in Table 4.

TABLE 3
COMPLICATIONS OF CONIZATIONS OF CERVIX IN PREGNANCY

	<i>Current Series (10 Cases) PER CENT</i>	<i>O'Leary Sloan Hosp. (39 Cases) PER CENT</i>	<i>Rad Vancouver (38 Cases) PER CENT</i>	<i>Morton (U. Calif.) (36 Cases) PER CENT</i>	<i>Ullery (Ohio S.) (80 Cases) PER CENT</i>
Hemorrhage	10	2.5	2.5	6	5
Premature delivery		7.5			3
Abortion (post-cone)	10	5	9	6	3
Cervical laceration (at deliv.)		7.5		6	
Cervical dystocia	10				
Incompetent cervix		2.5		3	
Death					1.2 (1 Case)
Total Complication Rate	20	18	13	19	11

When we compare groups of cases treated by radiation or surgery, we must consider the fact that staging the extent of malignant disease must be on a clinical basis in radiation groups, a difficult business in the pregnant patients. Clinics emphasizing surgical management have an opportunity to estimate staging clinically and then examine the pelvis at the operating table and the excised nodes and parametrial tissue for accurate pathological staging. Therefore, 12-20 per cent of patients with clinical stage I lesions treated by radiation, are really stage IV lesions due to unrecognized nodal metastases.

PHILOSOPHY OF THERAPY

Another consideration is that most of the reported groups of cases are not pure series of radiation or surgical management. The most aggressive surgeons have a few cases they have given to the radiologists, often the more advanced cases; and the radiologists have a few cases "stolen" by the surgeons, often early cases. It is our opinion that irradiation therapy is the treatment of choice for invasive carcinoma of the cervix, at our present state of knowledge. The mode of therapy chosen for the patients in our series is shown in Table 5.

Most authors agree that therapy of a cervical malignancy found in early pregnancy should proceed without delay. This requires sacrifice of the conceptus. Some patients, particularly Roman Catholics, have difficulty accepting loss of the fetus. These patients may be assured that this procedure is acceptable according to the theological principle of "double effect," as outlined in the code of Ethical and Religious Directives for Catholic Hospitals.⁵ (The Principle of Double Effect states that an act having both good and bad effects is licit provided: A. the act itself is not

morally bad, B. that the evil effect is sincerely not desired, but merely tolerated, C. the evil is not the means of obtaining the good effect, and D. that the good effect is sufficiently important to outweigh the harmful effect.)

How do we manage the conceptus when radiation therapy becomes necessary? In the first trimester, the conceptus presents little problem since abortion will occur in most cases during external radiation therapy. There is almost universal agree-

TABLE 4
5 YEAR CURE RATE OF INVASIVE
CARCINOMA OF CERVIX IN PREGNANCY

	<i>Radical Surgery (per cent)</i>	<i>Radiation PREGNANCY IN UTERUS (PER CENT)</i>	<i>UTERUS EMPTY (PER CENT)</i>
Memorial CA Hosp., N. Y., 32 Cases (Brunswick)	44 ¹		
Univ. Illinois, 22 Cases (Lash)	83 ²		
Univ. Minnesota, 22 Cases (Prem & McElvey)...		85	
Kinch (Literature Review) ..		48	
Univ. Arkansas, 18 Cases (Willis Brown)			55
Univ. Indiana, 16 Cases (Stander)			44 ³
Ohio State Univ., 27 Cases (Holzalpfel)			48
Kistner (Review of Literature) 54		44	58

- 1. Two Stage 4.
- 2. All Stage I Cases Survived 5 years.
- 3. One Stage 4.

ment that delivery of a large conceptus through a cervix containing invasive carcinoma is undesirable because of the dangers of hemorrhage, infection, and dissemination of the tumor. A recent series from Puerto Rico was set up to refute this thesis, allowing most patients to deliver per vaginum. They concluded with survival results poorer than average.⁶ We therefore feel that after 12-13 weeks' gestation, when the cervix would have to dilate considerably to allow passage of the conceptus, the uterus should be emptied by hysterectomy prior to therapy.

The real problem cases are those between 26 and 34 weeks of gestation. Should the fetus be allowed to mature to sufficient size to survive a cesarean section delivery? There is evidence that we may expect advancement of the malignancy,

TABLE 5
CURRENT SERIES
MODE OF THERAPY

	<i>Cone</i>		<i>Hysterectomy</i>	
	<i>Only</i>	WITH C-SECTION	POST-PARTUM	
Stage O	1	1	4	
Stage I & Micro-invasive				
Stage II				
	<i>Radical Hysterectomy</i>		<i>Radiation</i>	
	<i>With Node Dissection</i>			
Stage O				
Stage I & Micro-invasive		2	4	
Stage II			1	

once it has become invasive, by one clinical stage each three months that therapy is delayed.⁷ Dr. Howard Jones of Johns Hopkins recently commented that, by awaiting fetal maturity and cesarean section, we are irradiating during uterine involution, when the blood supply to the area is diminishing, an unfavorable factor in view of recent emphasis on high oxygen gradients for enhanced radiation effect.⁸ He also feels that the hazard to the fetus of radium application to its mother's cervix may be more theoretical than actual. This ignores earlier reports of microcephaly in many infants surviving irradiation of their mothers. For invasive carcinoma of the cervix discovered in the last trimester of pregnancy, the weight of current opinion favors awaiting fetal maturity, cesarean section at about 36 weeks, followed by radiation therapy Tables 6 and 7

TABLE 6
PLAN OF THERAPY—STAGE O
CARCINOMA OF CERVIX IN PREGNANCY

<i>In Situ Lesion → Cone → Vaginal Delivery</i>	
6 ↓ Wks.	
Repeat Pap Smear	
(+) ↙	↘ (-)
Re-cone	Follow
↙	Pap Smears
Hysterectomy	Closely

summarize a complete plan of therapy for patients with carcinoma of the cervix complicating pregnancy.

We recommend allowing vaginal delivery at term in cases of carcinoma in situ. The Pap smear is repeated six weeks post partum. If it remains positive, a repeat conization is performed to rule out progression to invasive malignancy. Persisting in situ lesions are treated by hysterectomy, vaginal or abdominal, performed six weeks after conization, when healing of the cone site and post-partum involution are complete. The patient whose Pap smear is negative at her six-weeks' checkup, despite a tissue diagnosis of carcinoma in situ during pregnancy, may be followed with Pap smears at 3-4 month intervals, if she desires more children. If her family is complete, we frequently recommend that the uterus be removed.

Patients with invasive carcinoma of the cervix discovered in the first trimester of pregnancy are seen with the radiologist and receive external radiation therapy to a dosage of 3000R to Point

TABLE 7
PLAN OF THERAPY—INVASIVE
CARCINOMA OF CERVIX IN PREGNANCY

FIRST TRIMESTER:

External Radiation			
(Preg. in Situ) → May Abort → Radium Implant	↘	Spontaneous Abortion	
		Fail to Abort	
		6 ↓ Wks.	
		Hysterectomy	

SECOND TRIMESTER:

Abdominal 7d	External	
Hysterotomy → Radiation	→ Radium	

THIRD TRIMESTER:

Await Fetal Maturity → C-Section	7d	External	
		→ Radiation	→ Radium

B over a period of 3-4 weeks. They frequently abort, usually quite cleanly, during this time. Whether they do so or not, they are then admitted for radium implantation under general anesthesia, using an intracervical tandem and paracervical

TABLE 8
SURVIVAL BY TRIMESTER IN WHICH
LESION DISCOVERED³

	<i>1st Trimester (per cent)</i>	<i>2nd Trimester (per cent)</i>	<i>3rd Trimester (per cent)</i>	<i>Post- Partum (per cent)</i>
Stage I	92	74	86	24
Stage II	54	41	41	21

Kaplan culpostats to deliver 6600R to Point A and an additional 2000R to Point B. Broad-spectrum antibiotics are administered during the radium implantation. The rare patient who has not aborted 4-6 weeks after conclusion of radiation therapy is readmitted for a simple hysterectomy.

Invasive cases discovered in the second trimester initially undergo abdominal hysterotomy through a small classical or fundal incision. The endometrial cavity is carefully cleaned to minimize lochial flow and the hazard of pyometra during further therapy. External x-ray therapy, with the wound area shielded, is begun when sutures are removed on the sixth postoperative day. Radium implantation follows the completion of external therapy as previously described.

Invasive cases discovered in the third trimester are allowed to proceed to fetal viability. Cesarean

section is carried out at about 36 weeks, depending on estimated fetal size and maturity. Radiation therapy follows the section as described previously.

Table 8 presents a summary of survival rates by trimester gleaned from the literature by Dr. Robert Kistner.⁹ We note that survival rates are relatively the same in the three trimesters of pregnancy, with a slight edge to the first trimester. Survivals drop sharply if the lesions are discovered after delivery, presumably due to delay in diagnosis and tumor dissemination. We must find and treat these cases early. ★★★

1210 West Division St. (39530)

REFERENCES

1. Moore, D. B., and Gusberg, S. B.: Cancer Precursors in Pregnancy, *Obst. & Gynec.* 13:530, 1959.
2. Waldrop, G. M., and Palmer, J. P.: Carcinoma of the Cervix Associated with Pregnancy, *Am. J. Obst. & Gynec.* 86:202, 1963.
3. Kistner, R. W.; Gorback, A. C., and Smith, G. V.: Cervical Carcinoma in Pregnancy, *Obst. & Gynec.* 9:554, 1967.
4. Licci, J. A.: Carcinoma of the Cervix and Pregnancy, Analysis of III Cases, *Collected Papers of 5th Annual Clinic Conference on Cancer, 1960*, Yearbook Publishers, 1960.
5. Code of Ethical and Religions Directives for Catholic Hospitals, ed. 6, Catholic Hospital Association of U. S. and Canada, pp. 10-14.
6. Bosch, A., and Marcial, V.: Carcinoma of the Cervix Associated with Pregnancy, *Am. J. Roentgenol.* 96:92, 1966.
7. Diddle, A. W., and Williamson, P. J.: Cervical Carcinoma, *Am. J. Obst. & Gynec.* 89:975, 1964.
8. Jones, H. W., Jr., in discussion, Hulno, D. S.: Detection Cervical Cancer Among These Medically Indigent, *Public Health Report*, 81:143, 1966.
9. Kisner, R. W.: *Gynecology, Principles and Practice*, Chicago, Yearbook Publishers, 1964, pp. 169-170.

BREAKFAST AT TIFFANY'S

The fastidious restaurant patron was specifying his dinner wishes in precise, uncompromising terms to the waiter:

"I want a dozen oysters on the half-shell, not too small, not too salty, and not too fat. They must be served chilled, and I want them quickly."

"Yes, sir," replied the waiter. "With or without pearls?"

Radiologic Seminar LXVII: Bronchial Adenoma

PAUL H. MOORE, M.D.
Pascagoula, Mississippi

BRONCHIAL ADENOMAS, like all other entities in medicine, become more interesting as we learn more about them. It appears also that the more we learn about the so-called benign lesions, the more dangerous they become. In the past, especially before 1940, there was frequent failure to distinguish between bronchogenic carcinoma and bronchial adenoma.

The cause of confusion is readily understood, when the pathologic characteristics for bronchial adenoma are reviewed. It is most important to distinguish between these two, for even though we have a different concept of bronchial adenoma than in the past, the outlook of the patient is much worse with bronchogenic carcinoma.

The bronchial adenoma appears in two histological forms, the carcinoid type and the cylindroma type. Carcinoid type has gained much interest in the past few years. This type tumor is similar to the carcinoid tumor in the gastrointestinal tract. The stroma of the tumor is usually quite vascular, and the many delicate blood vessels may be so prominent as to resemble a hemangioma. This characteristic accounts for the frequency with which hemoptysis occurs.

A rare type of bronchial adenoma gives symptoms of the "carcinoid syndrome." This tumor is more active physiologically, more rapid growing, and more invasive than the more common type of adenoma. The feature of note of the carcinoid syndrome is the production of 5-hydroxytryptamine and the increased urinary excretion of 5-hydroxyindolacetic acid.

Cylindroma type occurs less frequently than the carcinoid type. The cells making up the tumor are smaller and the cytoplasm more basophilic than in carcinoid tumors. Cylindromas resemble malignant growth in histological structure, yet they are

no more likely to metastasize than the carcinoid type.

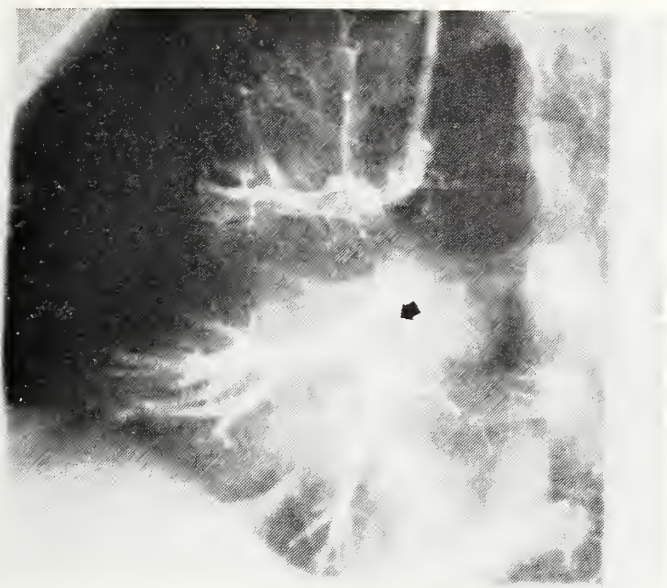
For many years these tumors were not considered to have malignant potentials and as recently as 1941, it was stated that these tumors were entirely benign. Since that time, however, there have been many reports of bronchial adenoma metastasizing to regional lymph nodes, liver, bone marrow, and other organs. Nevertheless, the occurrence of distal metastases from a bronchial adenoma remains an infrequent finding.

Bronchial adenoma, although infrequently encountered, should not be categorized as rare. It

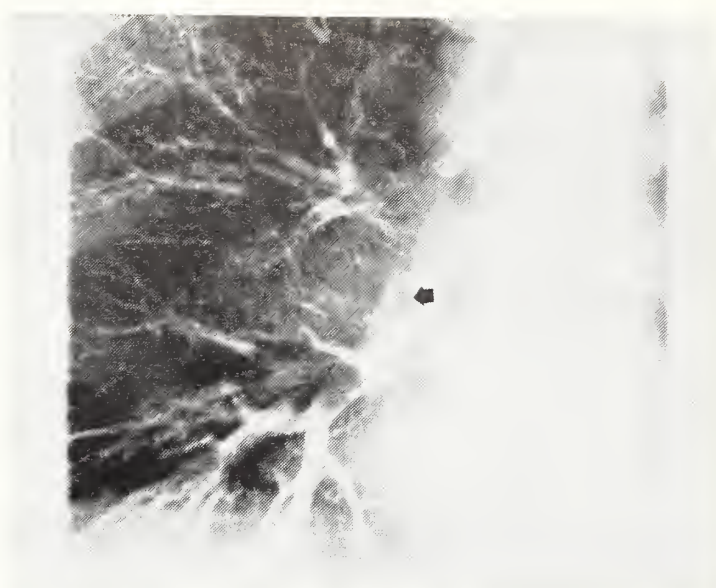


Figure 1. A mass is demonstrated in the right hilar zone.

Sponsored by the Mississippi Radiologic Society.



A



B

Figure 2, A and B. Right-sided bronchogram in anteroposterior and oblique views revealing persist-

ent filling defect in bronchus just above its bifurcation into middle and lower lobe branches.

comprises approximately 5 per cent of all bronchial neoplasms detected by bronchoscopy. Approximately 15 per cent of all bronchial adenomas are the cylindroma type and approximately 85 per cent are of the carcinoid type. Bronchial adenomas tend to occur in females as frequently as in males. They are usually encountered in patients under 40 years of age. The most common symptoms are those of hemorrhage, often recurring over a period of several years and bronchial obstruction with infection producing recurrent pneumonia or lung abscess. Wheezing, localized atelectasis, and bronchiectasis may also be found in the presence of bronchial adenoma.

If a person under 40 years of age has recurrent bouts of bronchial obstruction or repeated episodes of hemoptysis, bronchial adenoma should be considered, especially if the patient is female. Routine PA and lateral roentgenograms may also help to make a diagnosis. The roentgenographic appearance is seldom characteristic. Smaller tumors may cast no shadow, but segmental or lobar emphysema may be detected in the presence of partial obstruction. Complete obstruction produces atelectasis or, frequently, the secondary inflammatory and bronchiectatic changes in the lung distal to the point of obstruction are prominent. Sometimes circumscribed masses are visible (Figure 1).

Due to these roentgenographic findings and

symptoms, bronchoscopy is usually performed. Due to the location of most large bronchi they are readily detected. Because of the bleeding tendency of bronchial adenomas, a biopsy is not usually carried out. Following bronchoscopy, the bronchoscopist can easily place an opaque catheter in the trachea, and a bronchogram can be carried out with little difficulty.

If there is unusual delay between the time the patient leaves the bronchoscopy room and the time he arrives in the x-ray department, the radiologist can simply instill Xylocaine, 1 to 4 per cent, into the catheter and retain satisfactory anesthesia. The bronchogram will reveal a radiolucent area or filling defect in the bronchus, giving exact location of the tumor (Figure 2). ★★★

Singing River Hospital (39567)

REFERENCES

1. Toker, Cyril: Observations on the Ultrastructure of a Bronchial Adenoma (Carcinoid Type), *Cancer* 19:1943 (December) 1966.
2. Warner, Richard R. Pichel, and Southern, A. Louis: Carcinoid Syndrome Produced by Metastasizing Bronchial Adenoma, *Am. J. Med.* 24:903, 1958.
3. Stanford, W. R., et al.: Bronchial Adenoma (Carcinoid Type) With Solitary Metastasis and Associated Functioning Carcinoid Syndrome, *South M. J.* 51:449, 1958.
4. Hinshaw, H. C., and Garland, L. Henry: *Diseases of the Chest*, ed. 2, Philadelphia, W. B. Saunders Company, 1963.

Temporary Artificial Pacing of the Heart

THOS. M. BLAKE, M.D., ROBERT A. JOHNSON, M.D.,
and EDMUNDO POMBO, M.D.
Jackson, Mississippi

CLINICALLY USEFUL ARTIFICIAL pacing of the heart began with the system introduced by Dr. Zoll¹ in the mid fifties, and this method, though painful for the patient and practical for only short periods of time, is still used in some circumstances. With the development of implantable pulse generator units,^{2, 3} long-term pacing became available and in the past few years has been used successfully in the treatment of many thousands of patients with the result that it is now an established part of the therapeutic armamentarium. Pacing by means of an intraventricular electrode⁴ inserted transvenously and activated by an external unit is useful for temporary control of heart rate during emergencies and during surgery for implantation of a permanent system. It is the purpose of this paper to describe the authors' experience with this type of temporary pacing and to discuss the indications for artificial pacing in general.

There is one clear indication for artificial pacing: symptoms due to bradycardia. In most cases this means third degree atrio-ventricular block with Stokes-Adams attacks, but in some instances the symptoms are congestive failure, weakness, and/or "dizzy spells." Whether there are symptoms due to bradycardia or not, second degree AV block complicating acute myocardial infarction may be a warning of impending third degree block. It is our present opinion that when facilities are readily available and the patient is in good condition a temporary pacemaker should be inserted prophylactically.

Placement of the transvenous electrode is accomplished easily and without the need for unusual equipment. Except for the fact that it does not have a lumen, the electrode looks much like an ordinary cardiac, or ureteral, catheter with two

small metal bands near its tip and two lead wires at its proximal end. The tip is inserted into a vein (we prefer an antecubital one, usually the left basilic) under local anesthesia and advanced into the apex of the right ventricle with fluoroscopic guidance and electrocardiographic monitor-

With the development of implantable pulse generator units, long-term artificial pacing of the heart became possible. In the past few years it has been used successfully in the treatment of many thousands of patients. Pacing by means of an intraventricular electrode inserted transvenously and activated by an external unit is useful for temporary control of heart rate during emergencies and during surgery for implantation of a permanent system. The authors review their experience with this type of temporary pacing and discuss the indications for artificial pacing in general.

ing and with facilities for external pacing and countershock at hand. It is not a painful procedure and takes only a few minutes.

When the tip is in place (it does not have to be in contact with the ventricular wall), the "catheter" is secured to the vein and taped to the arm and the lead wires connected to the poles of the pulse generator which is strapped to the patient's body in a convenient place. The patient's response to a heart rate of 70 varies from immediate relief ("Now I can take a deep breath") to no reaction at all, but it is usual for him to fall asleep promptly.

Between November of 1963 and May of 1967 we placed 47 temporary pacemakers in 41 patients (36/31 at the University Hospital and 11/10 at the Veterans Administration Hospital).

From the Department of Medicine, University of Mississippi School of Medicine, and Veterans Administration Hospital.

Five of the six instances in which temporary pacing has been necessary more than once have been for replacement or repair of equipment; one was for control of recurrent Stokes-Adams attacks in a patient in whom a permanent system had not been implanted when he was treated first. The patients have ranged in age from 28 to 84 years with an average of 65 and there have been 12 women (40 per cent of the University Hospital series) and 29 men. Though the hospital population at risk has been approximately 50 per cent Negro, only five patients (12 per cent) have been Negroes; one patient was an Indian.

Thirty-six of the 41 patients had third degree AV block, and the basis for bradycardia in the others included: a congenital anomaly of cardiac mechanism of uncertain nature associated with bradycardia of supraventricular origin in one patient, sinus arrest with AV nodal pacemaker in one patient, sinus bradycardia in one, and second degree AV block complicating acute myocardial infarction in two. In only two instances has ventricular fibrillation been found to be the immediate mechanism of diminution of cardiac output; in the others it has been an idioventricular mechanism at a rate less than 30 per minute.

INDICATIONS FOR PACING

Immediate indications for pacing were: acute cerebral vascular insufficiency; i.e., seizures, syncope, or dizziness, in 28 patients (27 of the 36 with third degree AV block and the one young man with the congenital anomaly of mechanism), refractory congestive failure in two, second degree AV block complicating acute myocardial infarction in two, prophylaxis during non-cardiac surgery in two patients with third degree block, and weakness in seven others with third degree block.

Recognizing the limitations inherent in such a clinical diagnosis, the disease responsible for bradycardia is thought to have been coronary atherosclerosis in all but four, perhaps five of our patients. These exceptions, all under 50, include the man with a congenital anomaly of mechanism (age 28), one with acute rheumatic pancarditis, one with muscular dystrophy, and one with an idiopathic cardiac myopathy with no manifestations other than those of AV block. Another patient under 50 may fall into the category of "idiopathic cardiac myopathy."

Associated diseases have been those expected in the age group concerned, diabetes, emphysema, and hypertension. A history of hypertension and of congestive failure, though, is particularly difficult to evaluate in these patients because systolic hypertension is a part of bradycardia and seems

to have been interpreted in some cases as a separate entity. A systolic murmur is common with marked bradycardia, too, and this, plus cardiac enlargement and dyspnea on exertion, has led to a diagnosis of congestive failure in some.

VASCULAR INSUFFICIENCY

Symptoms of transient cerebral vascular insufficiency had been recognized as such in most instances but had been attributed in others to middle ear disease or to cerebral vascular disease. Initial evidence of third degree AV block seems to have appeared as long as 14 years before the insertion of the pacemaker in one patient, and the average was about two years. Many patients, though, were seen within hours of the first manifestation of block. In our patients it was unusual for acute symptoms, or symptoms at rest, to be found when the heart rate was above 30 per minute.

Serious complications associated with the use of the transvenous temporary pacemaker have been rare and related to technical problems. Early in the series it was our policy to place the tip of the catheter in the outflow tract of the right ventricle, and this resulted sometimes in displacement forward into the pulmonary artery with failure to pace; similarly, the presence of too redundant a loop in the "catheter" seemed to increase the likelihood of displacement. Recently we have positioned the tip in the apex of the right ventricle, avoided redundancy, and have had consistently satisfactory pacing.

At least one failure was due to a break in a wire in an electrode that had been used before, and since then electrodes have been discarded after one use. We have not used anticoagulants, and there has been no embolism or evidence of venous thrombosis. Perforation of the anterior wall of the right ventricle by the electrode tip has occurred in three patients, an incidence of 8 per cent. This has proved to be a benign complication recognized only at surgery and associated with no morbidity.

REVIEW OF DEATHS

Six of our patients have died during the hospitalization in which the pacemaker was inserted; two of myocardial infarctions while being paced, one while being paced in an attempt to alleviate intractable failure in the presence of uremia and hypertension, one of a myocardial infarct three days after implantation of a permanent unit with epicardial electrodes, and two of emphysema and associated diseases several days after implantation of permanent epicardial systems. While pacing

has been unable to sustain life in these instances, there is no specific reason to believe that death in any case was due to ventricular fibrillation precipitated by the pacemaker stimulus.

The fundamental indication for electrical pacing of the heart is the presence of symptoms due to bradycardia, but it should be specified that neither bradycardia per se nor simple syncope is an indication by itself. There are many causes of syncope, some of them associated with an increase in vagal tone and sinus bradycardia. If syncope is due to third degree AV block with a slow ventricular pacemaker; i.e., Stokes-Adams attacks, the usual situation, or to some other abnormality of cardiac mechanism, this must be proved electrocardiographically before a pacemaker is inserted. It is possible for a patient to have symptoms due to third degree block and then to have no block at all a few hours later, and when "demand" pacemakers presently being developed are available, the suspicion that such is the case may be an adequate indication for a pacemaker—but not now.

SECOND DEGREE AV BLOCK

The question of whether a patient with second degree AV block complicating acute myocardial infarction should be paced is one which has not been answered satisfactorily yet. Placement of a transvenous pacemaker in the right ventricle in such cases probably is the part of conservatism if facilities are available and the patient is in condition to be moved; but our experience with this problem is small and that in the literature is not very large. There is reason to suspect that the mortality rate in these patients is not modified greatly by electrical pacing.⁴

It is important sometimes to explain to the family and the patient that the presence of an electrical pacemaker is no guarantee that the patient will not die of his underlying disease. He should

not die of ventricular asystole, but ventricular fibrillation is still a risk. In the early days of pacing it was feared that competition between the artificial unit and intrinsic foci would result in reciprocal mechanisms and ventricular fibrillation. This can happen⁵ but equipment has been designed to deliver stimuli that are so small and brief that the problem is no deterrent at all to the use of pacemakers.

Symptoms due to bradycardia; i.e., cerebral vascular insufficiency, weakness, and/or congestive heart failure, can be controlled by electrical pacing of the heart. Pacing is an established clinical procedure which can be applied temporarily or permanently with very little risk and gratifying results. ★★★

2500 North State St. (39216)

Permanent pacemakers in the patients in this series have been implanted by Drs. James D. Hardy, Hilary Timmis, William Fain, Carlos Chavez, and Watts R. Webb. Since publication of the paper "Demand" pacemakers have become available commercially.

REFERENCES

1. Zoll, Paul M.; Paul, Milton H.; Linenthal, Arthur J.; Norman, Leona R., and Gibson, William: The Effects of External Electric Currents on the Heart: Control of Cardiac Rhythm and Induction and Termination of Cardiac Arrhythmias, *Circulation* 14:745-756 (November) 1956.
2. Chardack, W. M.; Gage, A. A., and Greatbatch, W.: A Transistorized, Self-Contained, Implantable Pacemaker for the Long-Term Correction of Complete Heart Block, *Surgery* 48:643, 1960.
3. Chardack, William M.; Gage, Andrew A.; Federico, Anthony J.; Schimert, George, and Greatbatch, Wilson: The Long-Term Treatment of Heart Block, *Progress in Cardiovascular Diseases* 9:105-135 (September) 1966.
4. Parsonnet, Victor; Zucker, I. Richard; Gilbert, Lawrence, and Asa, M. Maxim: An Intracardiac Bipolar Electrode for Interim Treatment of Complete Heart Block, *Am. J. Cardiology* 10:261-265 (August) 1962.
5. Jackson, A. E., and Bashour, F. A.: Cardiac Arrhythmias in Acute Myocardial Infarction. I. Complete Heart Block and Its Natural History, *Diseases of the Chest* 51:31-38 (January) 1967.
6. Bilitch, Michael; Cosby, Richard S., and Cafferky, Edwin A.: Ventricular Fibrillation and Competitive Pacing, *New England J. Med.* 276:598-604 (March 16) 1967.

COMBAT SERVICE

Governor Ronald Reagan of California says that Defense Secretary Robert McNamara's trips to Viet Nam are getting downright dangerous. On the last junket, the Secretary's plane was shot at twice—once over Denver.

Aspects of Thyroid Disease

HERBERT G. LANGFORD, M.D.

Jackson, Mississippi

KNOWLEDGE OF THYROID disease progresses by bits and pieces. Some of the advances, especially in the diagnosis of thyroid disease, contribute to our confusion as well as to our knowledge. This paper will emphasize aspects that have given residents and fellows at the University of Mississippi School of Medicine the most difficulty.

PHYSICAL EXAMINATION

There has been no recent breakthrough in physical examination. There are, however, several points that deserve noting. We always think in terms of palpation of the thyroid, but inspection in a good light with the neck arched (Figure 1) may reveal enlargement or asymmetry missed on palpation. This closer look is especially valuable in the obese or muscular person.

The bed patient is a trap. Gravity, the flexed neck and poor light conspire to make physicians miss thyroid enlargement or irregularity. If the patient is seriously ill, the risk of omission is compounded (Figure 2).

Our approach to a single nodule is different from our approach to multiple nodules, especially in an enlarged gland. Therefore, careful palpation is of utmost importance. The use of the thyroid scan is a useful extension of physical examination, and the two approaches often enable us to avoid surgery. Many so-called single nodules will turn out to be the largest of many lumps in a moderately large gland.

The consistence of the gland is important also. The firm, woody gland of chronic thyroiditis has a different feel from the softer colloid goiter. Localized areas of tenderness may suggest thyroid-

itis. Progressive softness of the gland may precede visible decrease in size as the gland responds to therapy.

The history is all-important. At the moment I only wish to emphasize those aspects of the history which are significant in the evaluation of specific tests. It is an interesting turn that the history

The thyroid is not the cause of all disease, nor can it simulate them all, writes the author. But it can simulate enough problems that all practitioners must be wary, he says. He emphasizes aspects that have given the most difficulty in his experience.

which prompted the test must often be scanned even harder after the tests to interpret the results.

THYROID FUNCTION TESTS

The lowering of the PBI by the hypoalbuminemia of nephrosis and cirrhosis is well-known. Less well-known is the lowering produced by Dilantin, which competes with thyroxin for binding sites on plasma proteins. The free thyroxin is not lowered, so the patient does not become hypothyroid. A confusing situation can occur. The epileptic, whose mind is clouded by his disease or his medicine and who is apathetic from phenobarbital, may present with a low PBI because of Dilantin. There is also a slight lowering of PBI produced by testosterone, but this is not enough to be of clinical importance.

Of course, iodides elevate the PBI, and multiple sources of iodides are a constant source of confusion. An important new cause of PBI elevation is "The Pill." The function of "The Pill" is to produce pseudo-pregnancy. Pregnancy is associated

From the Department of Medicine, University of Mississippi School of Medicine.

Read before the Section on General Practice, 99th Annual Session, Mississippi State Medical Association, Biloxi, May 15-18, 1967.

with elevated PBI's without hyperthyroidism because of the estrogen-induced elevation of thyroxin-binding protein. The elevated PBI's persist during the rest period between cycles and probably last for two weeks after taking the medicine. The T-3 resin tests results are lowered in this situation. Therefore, by doing both the T-3 resin and the PBI you may get an approximation of the patient's state.

The Ral uptake is of great value in the diagnosis of hyperthyroidism, but it is useless in the positive diagnosis of hypothyroidism. A normal uptake excludes hypothyroidism [except in a few rare congenital goiters], but a low uptake cannot diagnose it.

The Ral uptake does have a modest and esoteric value in differentiating primary from secondary hypothyroidism. In pituitary hypothyroidism the uptake may be at a peak in 72 hours rather than at 6 or 24 hours as in primary hypothyroidism.

THYROIDITIS

Our interest in the tests is to diagnose the disease, and thyroiditis is a good example of how confusing the tests can be. Thyroiditis may present in many guises. It is often mis-diagnosed. A patient may complain of an especially severe or long-lasting sore throat. When you talk to the patient, the soreness is low in his neck, not high. She may complain of pain in the ear due to the irritation of the ansa hypoglossi, which supplies both the thyroid and the auditory canal. She may have a fever of unknown origin, and on examination the thyroid may be quite tender.

Missing the diagnosis in any of these presentations is not terribly serious for the disease is usually self-limiting. But the patient may present with nervousness, increased appetite, and weight loss—all the symptoms of hyperthyroidism. The PBI may be elevated. Isn't this hyperthyroidism? The answer is yes and no. The patient is hyperthyroid, but it is because disease has shaken thyroxin loose from the gland. The laboratory, which has confused us so far with elevated PBI's, can help with a Ral uptake which will be low. Her hyperthyroidism usually will respond to two weeks of reserpine rather than being "Major Medical and Surgical."

The most frequent type of thyroiditis locally is called "Gulf Coast Thyroiditis" by some. Actually it is no more frequent here than elsewhere but wherever it occurs, it causes many so-called simple goiters. Their glands often are a little irregular and

may have areas of tenderness. Often there is a history of ill-defined malaise. The PBI is normal, but the patients look slightly hypothyroid. They may be; some of the PBI may be non-thyroxin iodoprotein. Surgical removal of part of the gland is usually followed by hypothyroidism. As full replacement thyroid therapy is usually followed by an impressive decrease in the gland size, there is little to be gained by surgery. Many ill-defined symptoms disappear with the exhibition of the thyroid.

HYPERTHYROIDISM

A fascinating aspect of this disease is the atypical presentation of some of these patients. A casual collection would include:

"Orbital Tumor"—A middle-aged Negro, with a 4-months' history of unilateral ocular protrusion, was studied with skull films, brain scan, and carotid arteriography. The last note on his chart before discharge stated that blood for T-3 resin test had been drawn. He is now responding well to propylthiouracil and has bilateral exophthalmos. The moral of this case is that exophthalmos may initially be unilateral and may appear before hyperthyroidism.

Ventricular Tachycardia—A 44-year-old woman, who previously was only mildly symptomatic, was admitted via the emergency room with a history of several hours of tachycardia and dyspnea.



Figure 1. Inspection is invaluable in the examination of the thyroid gland. W.H.G.L.'s sketch implies that lateral viewing is best, but I suggest looking at the gland from all angles.

She responded well to conventional therapy for her ventricular tachycardia. The next morning her thyrotoxicosis was suspected. The moral is that extra-systoles or atrial fibrillation are the usual arrhythmia of thyrotoxicosis, but any type of arrhythmia may occur.

Back Pain Due to Osteoporesis—A 62-year-old alert and capable business woman was admitted with the sole complaint of localized mid-thoracic pain. A film showed collapse of a thoracic vertebrae and generalized thinning of all the axial skeleton. The route to the diagnosis of hyperthyroidism was tortuous. In retrospect, resting tachycardia was the only clue.

Exacerbation of Diabetes—Once or twice a year we realize that one of our diabetic clinic patients has been gradually getting more severe; we look closer, and see that she has thyrotoxicosis. Usually, in the older patient, a toxic nodule is responsible.

"Brain Tumor"—A 15-year-old girl was referred to Dr. Walter Neill because of headaches, nausea, and ocular palsy. The headaches were from her exophthalmos and visual difficulties; the nausea from the headaches. He suspected hyperthyroidism, which she had.

Exophthalmos—One of the most perplexing problems of thyroid disease is the problem of the ocular manifestations. The final cause of exophthalmos is unknown, and definitive therapy is lacking. It rarely progresses after thyrotoxicosis develops, but it may develop, as probably occurred in the first case above, before hyperthyroidism develops. High doses of gluco-corticoids produce some improvement. Reserpine or guanethedine relieve the lid retraction.

Hypothyroidism—First suspect it; some of its disguises are sneaky. A few less typical presenting complaints are leg cramps, nervousness, hypothermia, madness, cerebellar ataxia and peripheral neuritis, and anemia.

The many complaints of one patient, a 50-year old woman who had had a partial thyroidectomy 20 years before, made no especial sense. One recurring complaint was of cramps in her legs. Pulses were good, arches were intact, veins fair. Her PBI was down, her cholesterol up; she has improved on thyroid.

The placid hypothyroid patient is classical, but some may complain of nervousness. I think these patients are the type of person that find that sedation makes them nervous. They dislike intensely not being in full control of their reactions.

Hypothermia may be profound and catastrophic, or it may be mild and asymptomatic. We recently hospitalized a severely hypertensive man.

The student on the case, asked why he had such a low temperature. We established that it was low when taken orally and when taken rectally, and we looked at him again. He was somnolent, his voice was rough, and his deep tendon reflexes were delayed in relaxation. The moral is that all low temperatures are not due to mouth breathing around the thermometer.

Asscher has popularized "myxedema madness." Most such patients are quietly rather than stridently mad. They mumble around the back wards

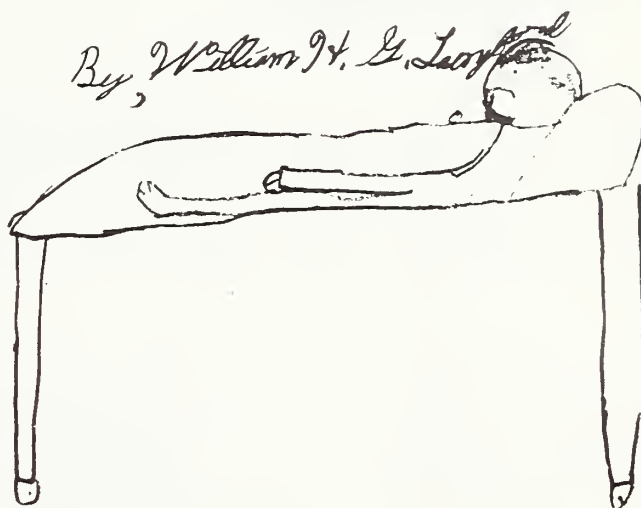


Figure 2. My expensive artist, age 9, has illustrated that the supine patient with a flexed neck has hidden his thyroid.

of chronic hospitals and nursing homes, confused, somnolent, and constipated. Look for them on your next visit to the county home.

Every year our neurologist finds hypothyroidism as a factor in a patient with cerebellar ataxia or peripheral neuritis. The etiology is probably complex; some have had more than their share of ethanol, some may also have pernicious anemia. The patients that are hypothyroid and have the above problems are helped by thyroid. The moral is, if the nervous system is involved, the thyroid may be at fault.

Hypothyroidism does not produce profound anemia, but modest and refractory anemia is a frequent finding. The lack-luster, "always anemic" women may be hypothyroid.

As thyroxin exerts such a profound effect upon function, it is not surprising that too much or too little can produce a multitude of signs and symptoms. The thyroid is not the cause of all disease, nor can it simulate them all. It can simulate enough problems that all practitioners must be wary, for it may be the problem of the next patient. ★★★

2500 North State St. (39216)



The President Speaking

‘There’s No Tomorrow’

TEMPLE AINSWORTH, M.D.

Jackson, Mississippi

A NEW LEGISLATURE for Mississippi shall have been chosen within the week along with a new chief executive. Not since the era of Reconstruction in the 1870's has the state been confronted with more serious political and social problems, so much so, in fact, that the new executive and legislative branches of state government have before them a challenge without precedent of a century's standing.

It takes no political soothsaying to predict that revenue and finance, education, and health will be the three major issues before the 1968 Regular Session of the Legislature. The budget will push the \$600 million mark, up about 40 per cent from the present \$435 million level. Our institutions of higher learning will seek more than \$100 million, and the common schools will hardly want less.

When the gavel sounds in the Legislature in January, Mississippi will be among eight states without a Title XIX program in operation or active preparation. Backed by a definitive, no-nonsense policy from our House of Delegates, the association will throw its full resources into support of a sound, medically-oriented Title XIX enactment. The task will not be easy, because at this moment, when the new biennial budget has largely taken shape in the councils of the executive department, not a dime has been earmarked for this vital and urgent legislation.

With the 1970 deadline rapidly approaching, there is no tomorrow for Mississippi on Title XIX. If the 1968 Regular Session fails to act, the new Governor will be faced with the unhappy choice of midnight action in a special session or losing all vendor medical matching funds a year from the coming New Year's eve.

Every physician has an opportunity to discuss this challenge—and those of other health issues—with representatives and senators. The best time to do this is now.

★★★



Abortion: Issue of the Shadows, Dilemma of Antiquity

I will give no deadly medicine to anyone if asked, nor suggest any such counsel; furthermore, I will not give to a woman an instrument to produce abortion.

—OATH OF HIPPOCRATES

I

ABORTION HAS BEEN A DIRTY word with dirty connotations for 22 centuries. For this reason, the subject has lurked in the crevices and shadows outside the circles of proper people for whom it had more meaning in vulgarity and wrongdoing than implications of medical, social, moral, and legal natures. But the mores of a culture have a way of catching up with compelling social issues. Result: Responsible segments of society are taking a hard look at a distasteful matter which has been with us all along. Whatever the individual viewpoint, the change has got to be for the better.

Nor was medicine, as a formal, learned scientific body, apart from this proscription of questionable logic, because until the American Medical Association revised its view on the issue at Atlantic City last June, the policy position of medical organization was one adopted by AMA in 1871. Even if the subject were fit for the cloistered halls of the scientific assembly, it is amply apparent that it was not held to be such in the forum of policy debate.

Nobody need be told that a century of this sort of circumstances creates a vacuum which, one way or another, is going to be filled. It became obvious that four separate, if not independent, elements comprised the problem: The moral-spiritual-

religious element, the legal aspect, the medical and scientific consideration, and the orientation of society as to custom, usage, and tradition. Compounding all of this, the major religious faiths find no agreement on abortion; the laws of the several states are a hodge-podge of contradictions; there is little consensus among physicians regarding indications for therapeutic abortion; and society is as confused as it is adamant in its divergent views on the subject.

The surd quantity of the human equation, abortion has been the ultimate evil in sex, a criminal offense in every state, an insoluble issue in morality, a legal nightmare, and for some physicians, a scientific matter of dubious merit. Something had to give, and it did.

II

If there is any agreement anywhere in this tenuous and delicate area of discussion, it is over illicit abortion which everybody, it is to be supposed, except the criminal abortionists, opposes. Clearly, then, the issue of abortion as being faced today has nothing to do with this unwholesome aspect of the matter. As for American medicine, policy statements from the AMA make it abundantly clear that there is neither conscious nor unwitting intention to bring about any change in law, custom, or attitude on criminal abortion. It has been, is now, and will be reprehensible and totally contrary to all reason, morality, and science.

The real issue is therapeutic abortion and the circumstances under which it may be undertaken. Of the four elements in the issue, consider first the

moral-spiritual-religious aspect, although not necessarily as a first priority.

In examining this matter, the Committee on Human Reproduction of the AMA asked the Department of Medicine and Religion to confer with the major faiths and summarize the view of each on abortion. The thesis of each is this:

Jewish. The Jewish position on therapeutic abortion is variable, although it tends to be liberal. Some Orthodox groups adhere to the Talmudic proscription against abortion for any reason except to save the mother's life. Most Conservative and Reform groups support legislative reform. A few rabbinical scholars advocate abolition or major revision of abortion laws so that the procedure would be available for social as well as medical reasons.

Catholic. Any procedure which has as its primary intent the production of abortion is morally reprehensible, according to the doctrine of the Roman Catholic Church. In this connection, it should be pointed out that even the present laws, which permit abortion to save or preserve the life of the mother, violate the doctrine of the Church.

Protestant. Although only a few of the major Protestant denominations have taken an official position on therapeutic abortion, a large number of Protestant theologians have made public pronouncements of their personal beliefs in this connection. Many have declared that legislative reform of abortion laws is appropriate.

Obviously, brief and necessarily broad summaries of the views of the major faiths represent generalizations or clerical and rabbinical interpretations—not precisely the individual viewpoints of individual members of the faiths. It is true that some Protestants oppose any liberalization or change in existing laws on abortion, while a number of Catholics favor legislative revision.

III

Of the 50 states and the District of Columbia, 45 states, including Mississippi, have statutes which permit induced termination of pregnancy only to save or preserve the *life* of the mother. The remaining five states and District of Columbia have laws permitting the procedure to protect the *health and safety* of the mother.

It is curiously anachronistic, then, that these laws, for the most part, 100 or more years old, mold on the law books while approximately 10,000 pregnancies are terminated each year by licensed physicians in accredited hospitals with the knowledge and concurrence of consulting col-

leagues. The AMA Committee on Human Reproduction says that "few of these (procedures) are necessary to save the mother's life" and that "American medicine is therefore confronted with a situation whereby conscientious practitioners, performing therapeutic abortions for reasons other than those posing a direct threat to the life of the mother, are acting contrary to existing laws."

Section 2223, Mississippi Code of 1942, Recompiled, makes criminal abortion a felony, and if the woman dies, it is murder. The same law says that "no act prohibited . . . shall be considered exempt unless performed upon the prior written advice of two reputable licensed physicians." Interestingly enough, the law was sponsored in the 1952 Regular Session of the Mississippi Legislature by the state medical association, following a study which was chaired by the late Dr. M. Q. Ewing of Amory.

In 1966, the law was amended to define the circumstances under which a duly licensed physician might perform the procedure:

—Where necessary for the preservation of the mother's life.

—Where pregnancy was caused by rape.

The *life* versus the *health and safety* aspects conflict is now under court test, and the anticipated judicial review may exert a profound impact on the abortion laws of every state. Last year, the Attorney General of California proceeded against nine prominent physicians who had performed



DORSEY "FLU-GRAM"

DON'T BE LULLED BY RELATIVE LACK OF FLU LAST WINTER. THIS WINTER BE PREPARED: WHEN THE COMPLAINTS ARE COUGH AND CONGESTION, YOU CAN RELIEVE THESE SYMPTOMS WITH TUSSAGESIC TABLETS. ONE TIMED-RELEASE TABLET AT MORNING, MIDAFTERNOON AND BEDTIME BRINGS UP TO 24 HOURS' RELIEF FROM TROUBLESOME COUGH AND STUFFED AND RUNNY NOSE. TUSSAGESIC IS THE FAMOUS TRIAMINIC FORMULA, PLUS THREE OTHER PROVED CONSTITUENTS. MAKES PATIENTS MORE COMFORTABLE. FAST. ASK YOUR DORSEY REPRESENTATIVE FOR SUPPLY OF STARTER SAMPLES, OR IF FLU IS ALREADY EPIDEMIC, PHONE COLLECT. SEE BELOW.

each

Tussagesic[®]

timed-release tablet contains:

Triaminic [®]	50 mg.
(phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. **Side effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Precautions:** The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES
a division of The Wander Company
Lincoln, Nebraska 68501

clip and file under "flu"

For relief of "flu-like" symptoms
Tussagesic timed-release tablets

PHONE COLLECT

For emergency starter samples
to Keith Sehnert, M.D.
Medical Director
(402) 434-6311

Fast delivery by your Dorsey
Representative

therapeutic abortions for fetal indications because of maternal rubella in the first trimester of pregnancy. It is the first recorded instance where a state abortion law has been invoked against a licensed physician who terminated pregnancy in an accredited hospital after appropriate consultation.

Another legal aspect is abortion for psychiatric reasons. McLane in his work, *Abortion in the United States*, states that as many as half of all therapeutic abortions are recommended for psychiatric reasons by consulting psychiatrists. Such procedures, he continues, can be performed only when there is a risk of suicide. But studies, the practice notwithstanding, indicate that suicide is relatively rare in pregnant women, being only one-tenth the rate that it is in nonpregnant women.

The psychiatrist who recommends therapeutic abortion may be forced to act contrary to the law and trust that no legal action will follow or that there will be any act by the patient to exaggerate the circumstances to justify his recommendation. In any event, he finds himself in an uncomfortable posture which is not mitigated by the fact that the courts have not—as yet—convicted a physician on such a charge.

IV

Many state medical associations, national specialty societies, and the AMA recognize that both policy positions and state laws governing abortion are a century behind the times. These policies and laws were determined at a time when a host of diseases exacted a high maternal death toll, when the technique for evacuating the uterus resulted in appreciable morbidity and mortality, when psychiatry was in knee pants, and when the hazards of maternal rubella—let alone a reason for phocomelia—were unknown.

Typical of policy positions emerging today among scientific bodies is that of the California Medical Association:

"Today's medical science bears little resemblance to that which was practice in California in 1872. Yet, paradoxically, today's physician still finds himself bound to outdated abortion legislation which perpetuates needless suffering and fosters poor medical practices.

"The California Medical Association has become increasingly concerned about the quality of medical care rendered under California's antiquated abortion statutes. On three separate occasions, the CMA House of Delegates has called for modification of the law to provide for thera-

peutic abortion which is medically justifiable and takes into consideration the product of conception as well as the health of the mother."

Writing in the *American Journal of Obstetrics and Gynecology*, Hall reported that a survey of New York and California obstetricians-gynecologists disclosed that a large majority favored modification of abortion laws to permit medically indicated procedures. Twenty-one state legislatures have pending bills for modification of laws, and two states, Colorado and North Carolina, have enacted such legislation. To say the very least, the issue is no longer in the crevices and shadows; it is before the forum of public opinion.

V

The policy position of the AMA, the Colorado and North Carolina enactments, and most pending legislation on abortion carry five stipulations:

—That there is documented medical evidence that continuation of the pregnancy may threaten the health or life of the mother, or

—There is documented medical evidence that the infant may be born with incapacitating physical deformity and mental deficiency, or

—There is documented medical evidence that continuation of the pregnancy, resulting from



"Physician, heal thyself."

legally established statutory or forcible rape or incest may constitute a threat to the mental or physical health of the patient; and

—Two physicians chosen because of their recognized professional competence have examined the patient and have concurred in writing, and

—The procedure is performed in a hospital accredited by the Joint Commission on Accreditation of Hospitals.

And there are two postscripts to this five-point policy: It is urgently necessary that the patient and her family be fully advised of medical implications inherent in the procedure and of the possible untoward emotional and physical sequelae of it. In brief, there must be informed consent. Secondly, all physicians, regardless of their personal views on therapeutic abortion, should appreciate that the AMA has stated that it is consistent with the *Principles of Medical Ethics* "for physicians to provide medical information and guidance to state legislatures in their consideration of revision or development of new legislation regarding therapeutic abortion . . ."

The license to practice medicine does not and cannot confer upon the physician the prerogative of deciding for himself, based solely on his own personal conscience and social judgment, whether to obey or disobey any existing law. But as the forward thrust of medical science brings him new horizons of professional capacity, he finds himself uncomfortably situated between what *can* be done and what *may* be done. For many physicians, this is as untenable as it is intolerable. Add to this purely professional dilemma the pressures of society, the influence of theology, and the ever-changing meaning and intent of the law. In these, there is a formula which appears to foster change. For the moment, however, there are fewer shadows over this crucial issue.—R.B.K.

Self-Medication? Well, Hardly Ever

An anonymous, tongue-in-cheek writer in the *New York Times* says that there ought to be more—not less—furor over self-medication, and he makes a convincing case by tracing the daily habits of a hypothetical (and probably hypertensive) Madison Ave. executive. The subject is medicating himself silly, not necessarily by gulping down handfuls of pills, either. Here's how it works.

Our executive arises in the morning and begins ingestion of massive doses of caffeine with four

cups of coffee. Having put his central nervous system in a state of near-riot, he proceeds to the next alkaloid, nicotine, conveniently taken through the respiratory system with five cigarettes before breakfast.

By noontime, the well-stimulated subject feels the need to calm down, so he goes for a central nervous system depressant via the martini route with a clinically effective dose of alcohol. The ritual is sometimes repeated a few hours later as he speeds home on the 5:14 commuter train. By bedtime, the now worn-out subject makes a bee line for his wife's tranquilizers, correctly anticipating a fitful night of tossing and tumbling.

When, after a steady diet of this regimen, he finally presents himself to the family physician on a Saturday morning, his first words are in righteous protestation of feeling badly for a no good reason at all. As for self-medication, he wouldn't think of filling himself up with those tricky drugs they dispense nowadays.—R.B.K.

Physicians Should Serve as Hospital Trustees

It's virtually unanimous in medicine: Physicians ought to be voting members of hospital governing boards.

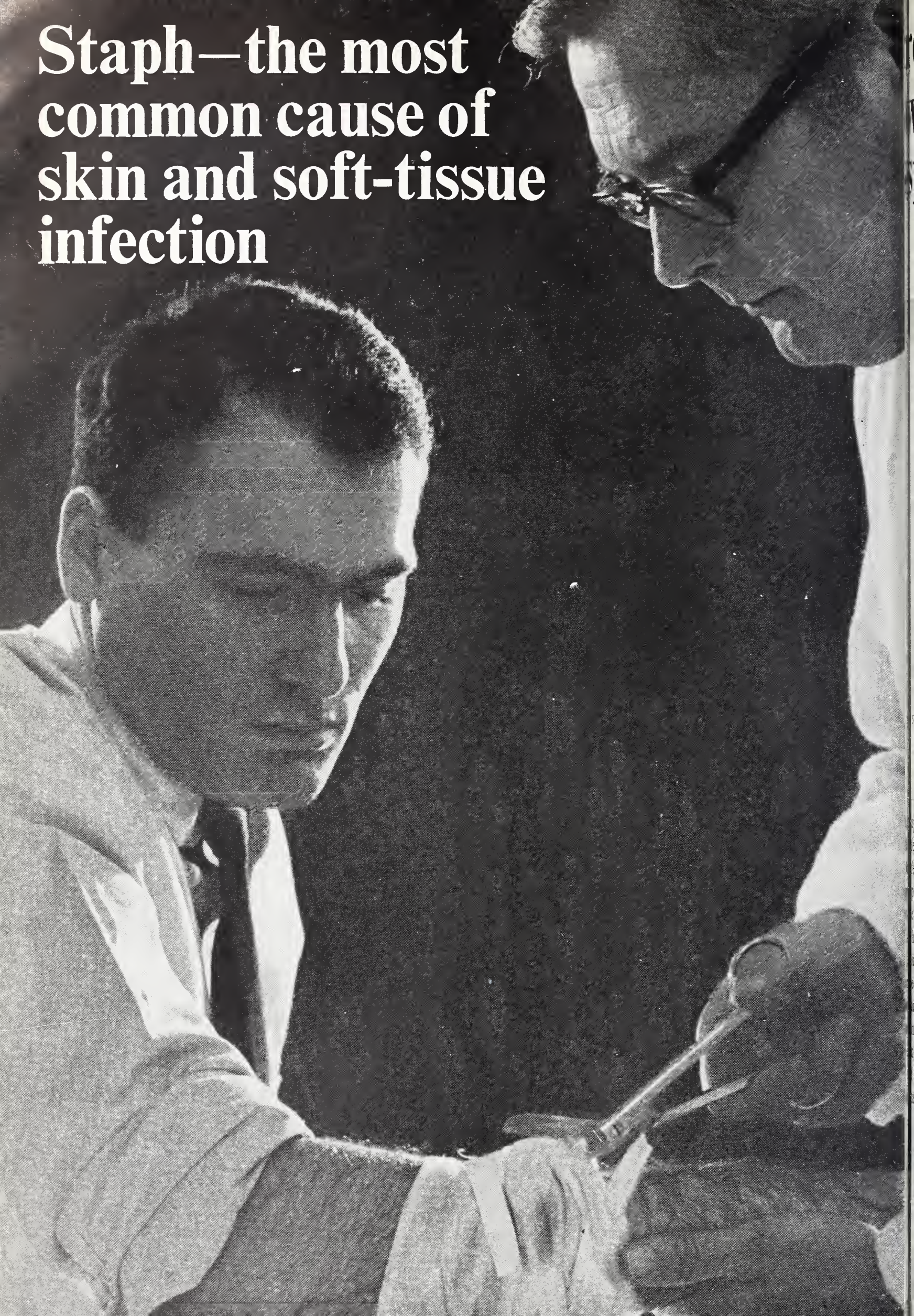
The AMA has said so, with the House of Delegates urging that "the Joint Commission on Accreditation of Hospitals be requested to encourage through its publications and in its surveys, the acceptance, wherever possible, of physicians elected or appointed by the medical staff to the (hospital) board of trustees with full voting rights as the most effective form of liaison between the medical staff and the hospital governing authorities . . ."

The Mississippi State Medical Association has said so, with the House of Delegates at the 99th Annual Session adopting the policy statement that the association "recognizes the need for close liaison between hospital governing boards and recommends that each hospital in the state have at least two voting doctors of medicine on its governing board who are either appointed or elected by the hospital medical staff from its membership."

The American Academy of General Practice has said so, with its Congress of Delegates, at the recent Dallas annual convention, reaffirming the AMA policy.

In proposing the MSMA policy to the House of Delegates last May, the Council on Medical Service, reporting its studies and deliberations, ob-

**Staph—the most
common cause of
skin and soft-tissue
infection**



reliably controlled with specific therapy



suitable dosage form for every staph situation

staph—the most common cause of skin and soft-tissue infection—also is responsible for many more serious infections, such as pneumonia, osteomyelitis, and bacteremia. Often, a seemingly minor skin infection is the source of metastatic spread to deeper structures. When findings on culture incriminate staph as the cause, Prostaphlin (sodium oxacillin) will provide specific effective therapy.

Bactericidal effectiveness. Hardly a staph organism can resist the bactericidal action of Prostaphlin (sodium oxacillin), as shown by a 34-month *in vitro* study. Of all staph isolates tested, 99.5% were sensitive to oxacillin.¹

Clinically proven. There is a high correlation between these *in vitro* findings and clinical results. Of 610 patients treated with Prostaphlin (sodium oxacillin), 89.8% were reported cured or improved, including those with staph infections resistant to penicillin G.² And since resistance does not appear to develop *in vivo*, therapy with oxacillin can be extended when necessary.

Outstanding safety record. Besides being staph-specific and rapidly absorbed—Prostaphlin (sodium oxacillin) has established an outstanding record of safety during five years of widespread clinical use. Continuous high blood levels of oxacillin have not produced toxic effects on kidney function, assuring a significant margin of safety. However, as with all penicillins, the possibility of allergic response should be considered. **Capsules, Oral Solution and Injectable.** Prostaphlin (sodium oxacillin) is available in three flexible dosage forms to suit the age of the patient and severity of infection—capsules, an oral solution for pediatric use, and multi-dose vials for injection, I.M. or I.V.

PRESCRIBING INFORMATION: For complete information, consult Official Package Circular. **Indications:** Infections caused by Staphylococci, particularly those due to penicillin G-resistant Staphylococci. **Contraindications:** A history of severe allergic reactions to penicillin. **Precautions:** Typical penicillin-allergic reactions may occur. Safety for use in pregnancy and premature infants is not established. Because of limited experience, use cautiously and evaluate organ system function frequently in neonates. Mycotic or bacterial superinfections may occur. Assess renal, hematopoietic and hepatic function intermittently during long-term therapy. **Adverse Reactions:** Skin rashes, pruritus, urticaria, eosinophilia, nausea, vomiting, diarrhea, fever and occasional anaphylaxis. Rare cases of reversible hepatocellular dysfunction have occurred. Moderate SGOT elevations have been noted. Thrombophlebitis has occurred occasionally during intravenous therapy and leukopenia was noted in two cases. **Usual Oral Dosage:** Adults: 500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. **Usual Parenteral Dosage:** Adults: 250-500 mg. q.4 or q.6h. Children: 50 mg./Kg./day. Treat beta-hemolytic streptococcal infections for at least 10 days. Give oral drug 1 to 2 hours before meals. **Supplied:** Capsules—250 and 500 mg. in bottles of 48. Injectable—250 mg., 500 mg., and 1 Gm. dry filled vial for I.M./I.V. use. For Oral Solution—100 ml. bottle, 250 mg./5 ml. when reconstituted.

A.H.F.S. CATEGORY 8:12.16

References: 1. Abstracted from *Antibiotic Sensitivity of Staphylococci Studied from November 1962 through August 1965*, reported by Griffith, L.J., Staphylococcus Reference Laboratory, V.A. Hospital, Batavia, N.Y. 2. Data on file, Bristol Laboratories.

BRISTOL

BRISTOL LABORATORIES/Division of Bristol-Myers Co., Syracuse, N.Y.

Whenever you
suspect staph
PROSTAPHLIN®
SODIUM OXACILLIN

EDITORIALS / Continued

served that "unfortunately, at times the medical staffs of hospitals are not a party to policy decisions affecting patient care." The council also recognized in its report that the hospital is the most important clinical environment in which medicine is practiced.

"Without the hospital," the Council on Medical Service stated, "the physician would be unable to exercise fully his special skills, and without the physician, the hospital is a queerly useless institution."

This statement underscores forcefully the urgent and compelling necessity for a very special sort of liaison, one which, in the opinion of American medicine, can come about only with a team effort at the governing and decision-making level in the hospital.

In many Mississippi hospitals, physicians are serving as members of the governing board. They are doing so with competency and dedication, and in so doing, they are developing an appreciation for problems in hospital management which may not always be apparent to physicians who are, for one reason or another, barred from the councils of hospital management.

There isn't a hospital administrator anywhere who does not seek to improve patient care. By the same token, there isn't a physician who does not seek the best possible care environment for his patient. Isn't it logical that these worthy quests be made more of a reality with a joint sharing of hospital management responsibility? After all, only the patient will benefit from it.—R.B.K.

Quality Counts, So Count the Chairmen!

The Mississippi State Medical Association need have little concern over its being among the smaller of the medium size state constituents of AMA, because quantity isn't the criterion this year in medical leadership.

Three important and impressive board chairmanships now belong to Mississippians: Dr. David B. Wilson is chairman of the Board of Trustees of the American Hospital Association by virtue of his holding the presidency; Dr. William E. Lotterhos was only recently named chairman of the Board of Directors of the American Academy of General Practice; and Dr. Lawrence W. Long most recently among the three was elected chair-

Butazolidin®, phenylbutazone
In Acute Superficial Thrombophlebitis

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Acute Superficial Thrombophlebitis: Initial: 6 capsules or tablets daily in divided doses for 2 or 3 days. Maintenance: 3 capsules or tablets daily. Usual duration of therapy is 5 to 7 days (rarely beyond 10 days). 6509-V(B)R2

*Stein, I.D.: Presented at the American Academy of General Practice, Dallas, Sept. 1967.

For complete details, please see full prescribing information.

man of the Board of Trustees of the International College of Surgeons.

But that's not all: Dr. Guy T. Vise of Meridian is president of the Southern Medical Association, and MSMA's own president, Dr. Temple Ainsworth of Jackson, is a member of the Board of Governors of the American College of Surgeons and an executive committeeman of the American Urological Association.

Dr. Howard A. Nelson of Greenwood is president of the plus-20,000 member University of Mississippi Alumni Association, and Dr. G. Swink Hicks of Natchez has just retired as president of the Mid-South Postgraduate Medical Assembly.

These achievements were earned, and every member of the state medical association can take justifiable pride in their colleagues who carry the name of the state into high and responsible offices. —R.B.K.



ALVIN BRENT, JR., of Jackson has announced the opening of his offices at 500-M East Woodrow Wilson Drive where he will limit his practice to internal medicine. He received his specialty training at the University Medical Center.

C. DUANE BURGESS has established his practice at 405 South 28th Ave. at Hattiesburg. He limits his professional work to psychiatry.

ROBERT A. DALE of Tupelo has announced the removal of his offices from 538 Main St. to Suite 103 in the Professional Building, corner of Main and Church Sts.

A. F. DUGGER, JR., formerly of Waynesboro, has relocated his practice at 2850 Mesa Verde Drive, Costa Mesa, Calif.

JOHN GORDON FORSHNER has opened his offices at 1316 Monroe St., Vicksburg. He will limit his practice to dermatology.

CECIL S. FRANKS of Tupelo has announced the association of BROWN ROBERTSON for the practice of otolaryngology. The professional offices are located at 421 Main St.

GUY T. GILLESPIE of Jackson has been appointed categorical cancer coordinator for the Mississippi Regional Medical Program. He is clinical assistant professor of medicine at the University Medical

Center. GUY D. CAMPBELL of Jackson is coordinator for the overall Regional Medical Program in Mississippi.

MARIAN W. GODBEY of Aberdeen has been appointed a member of the task force studying pulmonary and respiratory disabilities in the group engaged in statewide planning for vocational rehabilitation in Mississippi. Dr. Godbey is director of the Monroe County Health Department.

JAMES A. GRAVES of Biloxi is serving as president of the Gulf Coast Symphony Orchestra. Dr. Graves is retired from medical practice.

JOHN HEY has opened his offices for the general practice of medicine at 405 West River Road, Greenwood.

JOHN H. LONG of Hazlehurst has been named chairman of the Copiah County Advisory Board for the Central Mississippi Chapter of the American Red Cross. Dr. Long has previously served as campaign chairman for his county. In his new capacity, he will head Red Cross activities in Copiah County.

JOHN R. MULLENS, JR., of West Point has announced the removal of his offices from the Ellis Clinic at 105 Jordan Ave. to 211 W. Broad St.

DUDLEY H. MUTZIGER of Natchez became a member of golf's most exclusive club in September when he made a hole-in-one at the Belwood Country Club. Playing in a foursome, Dr. Mutziger scored the ace on the par three, number seven, 142 yards, using an eight iron.

ALTON R. PERRY of Natchez has announced limitation of his practice to ophthalmology. He formerly included otolaryngology. Dr. Perry's offices are located at 415 State St.

BILL POTTER, III, has announced the removal of his offices to Raymond for the general practice of medicine. He was formerly located at Utica.

T. E. ROSS, III, has joined the staff of the Hattiesburg Clinic at 415 S. 28th Ave. He limits his practice to general surgery.

JOE K. STEPHENS of West Point has announced the removal of his offices from the Ellis Clinic at 105 Jordan Ave. to 211 W. Broad St.

J. P. WIGGINS, J. C. RUSSEL, JR., JOHN T. MILAM, S. D. AUSTIN, and ARTHUR W. LINDSEY, JR., of Cleveland have announced the removal of their offices from 111 North St. to the Cleveland Clinic Building near the East Bolivar County Hospital, Highway 8 East.

Diarrhea

TROCINATE® 400 MG.
BRAND THIPHENAMIL HCl.

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



POSTGRADUATE CALENDAR

TRAUMA TO THE HAND

University Medical Center, Jackson

November 10, 1967, beginning at 9:00 a.m.

The trauma seminar, sponsored by the University of Mississippi School of Medicine Postgraduate Education Committee and the Department of Surgery, will include both specific problems and broad general aspects of traumatic injuries to the hand.

Guest faculty will include Dr. Daniel C. Riordan, professor of surgery (orthopaedic) at Tulane University School of Medicine; Dr. Frank McCue, chief of hand surgery, University of Virginia Hospital, and assistant professor of orthopaedic surgery, University of Virginia School of Medicine; and Dr. Arthur Steffe, resident in surgery (orthopaedic), Tulane University School of Medicine.

The University School of Medicine faculty participating will include Dr. Paul S. Derian, professor of orthopaedic surgery and chief of the division; Dr. Heber C. Ethridge, clinical assistant professor of surgery (plastic); Dr. Martin B. Harthcock, clinical instructor in surgery (plastic); and Dr. Thomas C. Turner, clinical assistant professor of orthopaedic surgery.

DIAGNOSIS AND MANAGEMENT OF THE ANEMIC PATIENT

University Medical Center, Jackson

November 30, 1967, beginning at 9:00 a.m.

Participants

Warren N. Bell, M.D., professor and chairman of clinical laboratory sciences and associate professor of medicine, University Medical Center
Robert B. Thompson, M.D., assistant professor of clinical laboratory sciences, University Medical Center

Gordon D. Deraps, M.D., instructor in medicine and director of the clinical cancer training program, University Medical Center

William F. Stapp, M.D., assistant professor of clinical laboratory sciences, University Medical Center

Thursday Morning

THE ERYTHRON—A TOTAL CONCEPT

Dr. Bell

BLOOD LOSS AND IRON METABOLISM

Dr. Thompson

CURRENT CONCEPTS IN HEMOLYTIC MECHANISMS

Dr. Deraps

Thursday Afternoon

INCIDENCE OF HEMOGLOBINOPATHIES IN MISSISSIPPI

Dr. Thompson

THE DYSPLASTIC ANEMIAS—A REAL CHALLENGE

Dr. Bell

USE OF BLOOD AND BLOOD FRACTIONS IN THE ANEMIC PATIENT

Dr. Stapp

SUMMARY

Dr. Bell

CIRCUIT COURSES

NORTHERN CIRCUIT

Tupelo—November 1, November 8, North Mississippi Medical Center, 7:00 p.m.

Greenwood—November 2, November 9, Greenwood LeFlore Hospital, 7:00 p.m.

Session 2—Early Diagnosis of Cancer of the Cervix—Dr. Karl Bolten

Current practices in the Management of Cancer of the Cervix—Dr. Richard Boronow

Session 3—Cardiac emergencies

In Children, Dr. David G. Watson

In Adults, Dr. Patrick Lehan

ADVANCES IN DIAGNOSIS AND MANAGEMENT OF CANCER

During the current academic year, The University of Mississippi Medical Center will offer a weekly program on various aspects of cancer diagnosis and management, under the auspices of the Tumor Clinic Committee with the aid of a United States Public Health Service Clinical Cancer Training Grant.

The series, held on successive Tuesdays throughout the year, is open without fee to all physicians. Meetings are in Room 3A of the University Medical Center from 5 p.m.-6 p.m. Coffee will be served.

November 7—Aspects of Chemical Carcinogenesis: Dr. Richard Klein, professor of pharmacology

November 14—Epidemiology and Cancer: Dr. Thomas J. Brooks, Jr., professor of preventive medicine and chairman of the department

November 21—Radiation Physics

November 28—Radiation Biology: Dr.

Bernard T. Hickman, associate professor of radiology

Subsequent schedules will be released at a later date.

FUTURE CALENDAR

November 1, 8

CIRCUIT COURSES, TUPELO

November 2, 9

CIRCUIT COURSES, GREENWOOD

November 10

TRAUMA TO THE HAND

November 30

DIAGNOSIS AND MANAGEMENT OF THE ANEMIC PATIENT

December 8

CARDIOPULMONARY RESUSCITATION

December 14

MODERN MANAGEMENT IN COMMON OBSTETRICAL COMPLICATIONS

January 3, 10, 17, 1968

CIRCUIT COURSES, BILOXI

January 4, 11, 18, 1968

CIRCUIT COURSES, HATTIESBURG

January 5, 1968

OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE

January 23, 1968

CIRCUIT COURSES, COLUMBUS

January 25, 1968

ALIMENTARY TRACT PROBLEMS

February 1, 1968

UMC DAY

February 15, 1968

NEUROLOGY SEMINAR (DISEASES OF CHILDREN)

February 20, 1968

CIRCUIT COURSES, NATCHEZ

February 27, 1968

CIRCUIT COURSES, COLUMBUS

March 1, 1968

RENAL DISEASE SEMINAR

March 5, 1968

CIRCUIT COURSES, MERIDIAN

March 14-15, 1968

SEMINAR ON RELIGION AND MEDICINE

POSTGRADUATE / Continued

March 27-29, 1968

CARDIOVASCULAR SEMINAR

April 1-2, 1968

AMERICAN BOARD OF SURGERY

April 2, 1968

CIRCUIT COURSES, MERIDIAN

April 11, 1968

DIABETES SEMINAR

April 16, 1968

CIRCUIT COURSES, NATCHEZ

April 18, 1968

THORACIC SOCIETY

April 23, 1968

CIRCUIT COURSES, COLUMBUS

May 7, 1968

CIRCUIT COURSES, MERIDIAN

May 13-16, 1968

MISSISSIPPI STATE MEDICAL ASSOCIATION



NEW MEMBERS

The following physician has been elected to membership by his respective component medical society in the Mississippi State Medical Association and the American Medical Association.

BOWLIN, JOHN WESLEY, Tupelo. Born Memphis, Tenn., July 20, 1933; M.D. University of Pennsylvania, Philadelphia, Penn., 1957; interned University Medical Center, Jackson, Miss., one year; residency University Medical Center, Jackson, Miss., five years; residency in thoracic surgery University of Kentucky, Lexington, Ky., one year; certified by American Board of Surgery in 1965, American Board Thoracic Surgery in 1966; elected June 13, 1967, by Northeast Mississippi Medical Society.



DEATHS



GORE, THOMAS MCFARLAND, Houston. M.D., University of Tennessee, Memphis, Tenn., 1940; died September 30, 1967, aged 61.

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habitation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.



Book Reviews

Voice-Speech-Language (Clinical Communication: Its Physiology and Pathology). By Richard Luchsinger, M.D., Associate Professor of Otolaryngology, Zurich University Medical School, and Godfrey E. Arnold, M.D., Professor of Surgery, Director of Otolaryngology, University of Mississippi Medical School. 812 pages with illustrations. California: Wadsworth Publishing Company, 1965. \$26.00.

This monumental work reviews and presents in a logical and fairly concise manner the scientific studies and developments in this field during the last hundred years. It is encyclopedic in that it embraces all specialties that pertain to it; pertinent anatomy, morphology, physiology and pathology; genetics, anthropology and biology; endocrinology and surgery; neurology, psychology and psychiatry; acoustics and musicology; audiology and speech therapy. It is well indexed.

First published in German by the same authors in 1949, it was revised and rewritten for the second German edition in 1958. It has been translated, revised and brought up to date, greatly enlarging it, for this first English edition. The bibliography is so vast and seemingly all-inclusive that it is a surprise to learn it has been slightly abbreviated in this edition.

It is not light reading. The whole subject of communicology is completely covered, and each phase thoroughly discussed. In applicable chapters, diagnosis, therapy and prognosis are presented clearly and adequately. The authors have made a great contribution to this subject in so comprehensively analyzing and outlining it, and in reviewing, assembling and editing it. Many of the recent investigative studies were made by them personally.

Pediatricians and general physicians interested in the speech and language difficulties of their patients, and psychologists and psychiatrists faced with these problems, will find the chapters on Language Disorders Due to Brain Damage, Stuttering, Psychoneurotic, Psychopathic and Mental Disorders well worth the price of the book. Oto-

laryngologists will find it invaluable; it has already been included in the Study Course for Residents in Otolaryngology. It is a must for speech therapists.

Concluding on a personal note, Mississippi physicians should be pleased and gratified that one of the distinguished authors has chosen Mississippi as his resident state, and has established a Communication Center at the University of Mississippi School of Medicine for the study and treatment of communication disorders.

EDLEY H. JONES, M.D.

Infant Nutrition. By Samuel J. Fomon, M.D. 289 pages with illustrations. Philadelphia: W. B. Saunders Company, 1967. \$10.50.

The author has brought together the results of his own work and that of many others to examine the current scientific basis of infant nutrition and to illustrate the manner in which this information should be applied to the everyday practice of infant feeding and to the various disorders of nutrition. It is gratifying to read of the precision or lack of precision on which requirements and advisable allowance for each nutrient is based. His emphasis on incremental gain in growth rather than the general growth curves most of us were taught will be of much interest to those who need to be able to detect failure to thrive at the earliest possible time. Any practitioner will gain much practical and useful information from a perusal of the chapters on milk and milk-based formulas, milk-free formulas and infant feeding in health and disease. If he has the time and interest, more detailed information is available in earlier chapters. In general, the information is sound and areas of differences are discussed.

There are a few points dismissed too lightly i.e., the effect of genetics in human growth; some recommendations made not yet generally accepted i.e., use of pyridoxine in infants treated with isoniazid and addition of Vitamin E to diet of premature infants; and some exaggerations i.e., quoting one author "... that it appears likely that milk antibody provides some protection of the breast-fed infant" whereas in truth the author used the word conceivable rather than likely. Very properly the concluding chapter raises many fascinating

areas of needed investigation in infancy—the relationship of diet and longevity, diet and incidence of disease, nutritional imprinting, meal-eating vs. nibbling, consequences of obesity and nutrition, brain growth and mental development.

This is a valuable reference book for every physician who is responsible for the feeding of infants during sickness and health.

BLAIR E. BATSON, M.D.

Federal Health Programs Is Seminar Topic

How patients of private health agencies can benefit from new federal health programs will be discussed by top government officials at a seminar to be held Nov. 18 during the 1967 annual convention of the National Society for Crippled Children and Adults (the Easter Seal Society) in Los Angeles.

Dr. Carruth J. Wagner, assistant surgeon general and director, Bureau of Health Services, U. S.

Public Health Service; Jerrold M. Michael, assistant surgeon general and assistant director, Bureau of Health Services, and C. Wayne Tucker, deputy assistant director, Bureau of Health Insurance, Social Security Administration are federal officials scheduled to speak.

Subjects of discussion will include Medicare, Title XIX, Comprehensive Health Planning, and home health programs, all relatively new government programs.

Because of the number and intricacies of recent federal legislative acts affecting health care, the seminar will be of interest to all health personnel concerned with improving care for patients in need of rehabilitation.

Drs. Wagner and Michael will outline opportunities for government cooperation in planning for comprehensive personal health services. Tucker will explain in detail how home health services can be brought under provisions of Medicare.

The convention, following the theme "Opportunities Unlimited," will be held November 16-19 at the Century Plaza Hotel. It is the annual meeting of hundreds of Easter Seal specialists and administrators from 50 states, Puerto Rico and District of Columbia.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

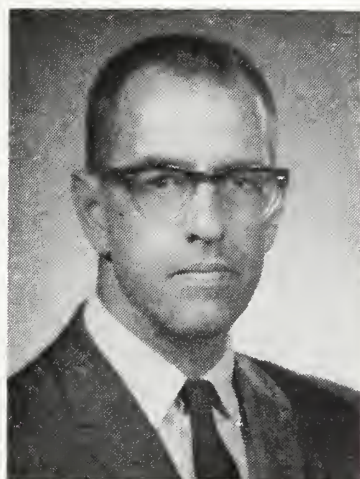
Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761



Utilization Review Conferences Are Set for Jackson, Hattiesburg, and Gulf Coast

A series of three conferences on utilization review in hospitals is set for Nov. 8 and 9 at Jackson, Hattiesburg, and Gulfport. The meeting series is jointly sponsored by the state medical association's Council on Medical Service and the Mississippi State Board of Health with the cooperation of the Mississippi Hospital Association and the Mississippi Association of Medical Records Librarians.



Dr. Slee

Dr. Virgil N. Slee of Ann Arbor, Mich., nationally known authority on utilization review will conduct each meet. Council on Medical Service Chairman Guy T. Vise of

Meridian said that meeting sites, times, and moderators are:

—Jackson: Nov. 8 at St. Dominic-Jackson Memorial Hospital, 1:30 o'clock in the afternoon, Dr. Benjamin F. Banahan, Jr., moderator.

—Hattiesburg: Nov. 8 at Forrest General Hospital, 7:30 o'clock in the evening, Dr. Frederick E. Tatum, moderator.

—Gulfport: Nov. 9 at the Memorial Hospital at Gulfport, 7:30 o'clock in the evening, Dr. C. D. Taylor, Jr., moderator.

In the identically structured programs, Dr. Slee's presentation will be followed by a panel discussion. Panelists will be physicians from the respective conference areas who serve on hospital utilization review committees, medical records librarians, and hospital administrators. The third program feature will be a question and answer session with audience participation.

Dr. Vise pointed out that earlier in the year a similar meeting was conducted in the northern portion of the state at Tupelo.

Dr. Slee is director of the Commission on Professional and Hospital Activities, a nonprofit study and research organization jointly sponsored by the American College of Physicians, American College of Surgeons, American Hospital Association, and the Southwestern Michigan Hospital Association. He is considered one of the nation's foremost authorities on utilization review.

The announcement stressed that all physicians, hospital administrative personnel, and hospital trustees are invited to the conferences.

Although utilization review has been brought into sharp focus because of its inclusion in Title XVIII of Public Law 89-97, Medicare, it is really not a new field of quality care control. In 1960, the American Medical Association's House of Delegates endorsed the concept of examining the justification for utilization of hospital facilities. The device of utilization review is physician-developed.

"Hospital staffs have always been charged with the responsibility for the quality of professional care rendered in the hospital," Dr. Vise explained. "Until recent years, the organized staff's primary function was conceived to be appraisal of medical care in terms of whether diagnoses were justified and courses of treatment and end results were warranted.

"More recently—and concomitantly with increased demand for hospital care," Dr. Vise continued, "a new dimension has been added to this responsibility of physicians. This, in brief, is their professional evaluation as to whether use of hospital facilities was appropriate."

The council chairman said that back in the 1930's when hospital admissions were 59 per 1,000 population annually in the United States, there was relatively little reason for concern over effective use. With the current rate more than 135 per 1,000 and hospital occupancy hitting a national mean of about 80 per cent, the matter becomes crucial.

Utilization review, however, is not a punitive

endeavor but rather an educational and self-administered project among physicians. As a fact-finding instrumentality of the medical staff, it operates to strengthen physician authority and extends staff responsibility.

Most utilization review programs are concerned over unnecessary admissions, excessive lengths of inpatient stay, delay in use of diagnostic facilities, delay in securing consultation or in making referrals, and factors contributing to such circumstances.

For a number of years, Dr. Slee has made special studies on utilization review, and he has built a data pool of studies said to be the most complete and comprehensive in the United States. He is a medical graduate of the Washington University School of Medicine at St. Louis, and he holds the master of public health from the University of Michigan. He is a Fellow of the American College of Physicians and of the American Public Health Association.

In addition to the Medicare requirement for utilization review programs in approved hospitals, the Joint Commission on Accreditation of Hospitals has made the program a precondition for full accreditation. The program is usually carried out in two ways: By "on the spot" determination for extended stay cases while the patient is still hospitalized and by retrospective evaluation of profiles of hospital utilization in random or sample review of retired charts. The November conference series will explore fully all aspects related to utilization review.

Dr. Parsons Is Honored by U.S. Army

Dr. Willard H. Parsons of Vicksburg has been appointed Surgeon Emeritus to the United States Army Medical Service, according to an announcement by Lt. Gen. Leonard D. Heaton of Washington, the surgeon general of the army.

In the formal notification to Dr. Parsons, Gen. Heaton said that "I wish to express my deepest appreciation to you, both personally and officially, for the superb manner in which you have fulfilled your responsibilities.

"Down through the years," Gen. Heaton continued, "we have regarded ourselves as indeed fortunate to have had an individual of your professional stature to serve as our consultant, and you have every right to be very proud of the

many significant contributions which you have made toward improving the caliber of medical care within the army medical service."

Dr. Parsons served four consecutive appointments as consultant to the surgeon general of the army. He has been Governor of the American College of Surgeons from Mississippi, chairman of the ACS Board of Governors, and first vice president and a member of the Board of Regents of the College. He has also served as president of the American Cancer Society, Mississippi Division.

Ruling Is Made on Board Hassle

The Judicial Council of the American Medical Association has found that the resolution on unapproved specialty boards adopted by the House of Delegates at the 1967 Annual Convention was not based upon evidence of unethical conduct.

The council considered the matter at the request of the American Board of Abdominal Surgery and the American Society of Abdominal Surgeons, charging that Resolution 123 as amended and adopted "constitutes an unwarranted and improper censure" of the AMA members who are also members of the two organizations.

The findings of the council also stated that the council has jurisdiction to determine the issues involved, and that Resolution 123 "should not be construed or interpreted as a determination of any violation of the Constitutions and Bylaws or the Principles of Medical Ethics of the American Medical Association on the part of the petitioners or those members of the AMA who are similarly involved."

Resolution 123, introduced by Dr. John W. Cline, past president of the AMA from San Francisco, stated that the AMA took "cognizance of the recent action of the American Board of Abdominal Surgery, which Board is not approved by the AMA, and has acted in defiance of the House of Delegates."

Dr. Cline was invited to appear before the council, and spoke concerning the introduction and adoption of the resolution.

Council Statement: "Within the frame of reference of Resolution 123 as adopted by the House of Delegates," the council statement said, "the testimony given at the hearing disclosed no evidence which would establish that the petitioners or members of the American Board of Abdominal Surgery and the American Society of Abdominal Surgeons have acted in violation of the Con-



Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?
in any case,
usually gram-negative*

Therapy:

two 500 mg. Caplets® q.i.d.
(initial adult dose)

Indications: Urinary tract infections caused by gram-negative and some gram-positive organisms.

Effects: Mainly mild, transient gastrointestinal disturbances; in occasional instances, drowsiness, fatigue, pruritus, rash, urticaria, mild eosinophilia, reversible subjective visual disturbances (overbrightness of vision, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), and reversible photosensitivity reactions. Excessive dosage, coupled with certain predisposing factors, has produced convulsions in a few patients.

Precautions: As with all new drugs, blood and liver function tests are advisable during prolonged treatment. Pending further experience, like most other therapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or impairment of kidney function. Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not arbitrarily be doubled unless under the close supervision of a physician. Bacterial resistance may develop.

In testing the urine for glucose in patients receiving NegGram, Clinistix® or Tes-Tape® should be used since other reagents give a false-positive reaction.

Dosage: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times a day) for one to two weeks. Thereafter, if prolonged treatment is indicated, dosage may be reduced to two Gm. daily. Children may be given approximately 25 mg. per pound of body weight per day, administered in divided doses. The dosage recommended above for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Until further experience is gained, infants under 1 month of age should not be treated with the drug.

Supply: Buff-colored, scored Caplets® of 500 mg. for adults, conveniently available in bottles of 56 (sufficient for one full week of therapy) and in bottles of 1000. 250 mg. for children, available in bottles of 56 and 1000.

References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on file. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: *Antimicrobial Agents and Chemotherapy* — 1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

NegGram®
Brand of
nalidixic acid
a specific anti-gram-negative

eradicates most urinary
tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.

- "Excellent" or "good" response reported in more than 2 out of 3 patients with either chronic or acute gram-negative infections.¹

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: *E. coli*, *Klebsiella*, *Aerobacter*, *Proteus*, *Paracolon* or *Pseudomonas*²... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

Parke-Davis

Parke-Davis Laboratories, New York, N. Y. 10016

stitution and Bylaws or the Principles of Medical Ethics of the American Medical Association."

Dr. Blaise Alfano of Melrose, Mass., secretary of the American Board of Abdominal Surgery, and one of the physicians who requested the opinion, commented that he was pleased with the decision, and said this clears up the controversy.

Dr. Edward J. Krol of Chicago, chairman of the board of the same group, commented:

"I think the American Board of Abdominal Surgery and the Society have been vindicated by this action of the Judicial Council.

"I am encouraged by this demonstration that we have a real democracy in the AMA," Dr. Krol added.

Dr. Purvis Addresses AMA Conference

Dr. George D. Purvis of Jackson, chairman of the state medical association's Committee on Occupational Health, appeared as a speaker before the AMA 27th Congress on Occupational Health at Atlanta. He discussed the study of occupational health programs in small plants, basing his paper on the comprehensive study presented by his committee to the last annual session.

Appearing on the same program segment during the two day meet at the new Regency Hyatt House at Atlanta was Dr. Harry E. Tebrock of New York who reported on similar studies of small plants by the National Manufacturers Association. He serves as chairman of the NAM Occupational Health Committee.



Dr. Henry F. Howe, secretary of the AMA Council on Occupational Health, greets Dr. George D. Purvis, state association chairman, at the 27th Congress on Occupational Health at Atlanta.

Dr. Benjamin W. Goodman of Hickory, N. C., medical director of a General Electric plant, described his industrial health facilities and a comprehensive small plant program. The three-member panel was chaired by Dr. R. Lomax Wells of Washington, D. C., chairman of the A.M.A. council.

Dr. Milford O. Rouse of Dallas, AMA president, keynoted the congress. He called on private practitioners to interest themselves in occupational health programs and make new and additional services available to management.

Other topics on the congress program included services for government employees, accident prevention, and a day addressed to psychologic problems in occupational medicine. About 400 were registered at the meeting.

A third day of activities was conducted for the benefit of state medical associations when the AMA Council on Occupational Health met with state chairmen. Dr. Purvis represented the association in these discussions.

Dr. Henry F. Howe of Chicago, secretary of the AMA council, organized the program and coordinated activities of the Atlanta congress.

Prematurity Parley Is Set for Florida

The First International Conference on Prematurity will be sponsored by the AMA Committee on Maternal and Child Care at Ft. Lauderdale, Fla., Jan. 11-13, 1968. The program is planned around three morning sessions to explore problems of prematurity in depth with emphasis on obstetrical prevention and pediatric intervention with the objective of reducing perinatal losses.

The AMA announcement said that open invitations are being extended to members of all state and county society maternal and child care committees, state health department directors of maternal and child health, and to medical school faculty members having a professional interest in the problem.

International speakers will discuss patterns of prematurity, mortality and morbidity factors, pathogenic implications, and national and international newborn programs.

Site of the meeting will be Pier 66 at Ft. Lauderdale, and conferees will have a choice of resort and luxury hotels. Further information may be obtained from the secretary of the AMA committee at the Chicago headquarters.

From a continuing study on nasal congestion . . .



timed to work while your patient does

A study being conducted by the Department of Otolaryngology, Greater Baltimore Medical Center is stockpiling evidence that points to the fast action and prolonged relief effected by Triaminic in the treatment of nasal congestion.

Begun in March 1966, the study to date has encompassed 85 patients with common nasal disorders—

and measured their response to recommended doses of Triaminic tablets.

Timed to release its oral nasal decongestant and two antihistamines within 8 hours, Triaminic was found to effect partial or complete relief in better than 82% of the subjects treated. Clearing nasal obstruction. Reducing turbinate swelling. Making breathing easier.

It's a comforting thing to know that Triaminic really works.

Triaminic[®] *timed-release tablets*

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride 50mg. Pyrilamine maleate 25mg. Pheniramine maleate 25mg.

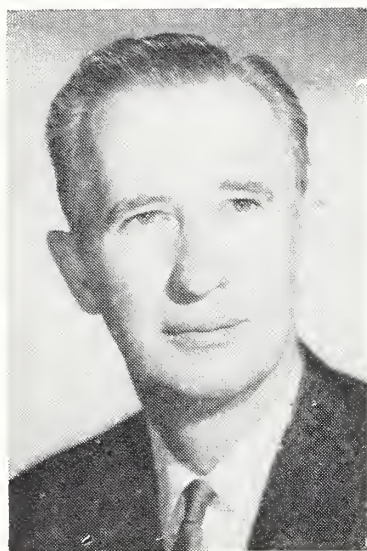
Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets.

Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES • *a division of The Wander Company* • **LINCOLN, NEBRASKA 68501**

Dr. Lotterhos Is New AAGP Board Chairman

Dr. William E. Lotterhos of Jackson was named chairman of the Board of Directors of the American Academy of General Practice as the 1967 Dallas convention closed. The academy celebrated induction of its 30,000th member to become the largest specialty society in American medicine.



Dr. Lotterhos

Dr. Maynard I. Shapiro of Chicago was named president-elect, defeating former Board Chairman Edward Kowalewski of Akron, Pa. Dr. George E. Burkett of Kingman, Kans., 1966 president-elect, was inaugurated president. Elected vice president by acclamation was Dr. Elmer M. Smith

of Des Moines whose sweep of the delegates was dramatized by his being in Viet Nam as a volunteer under the AMA program at the time of the convention.

The Academy's Congress of Delegates moved closer to implementation of the 20th specialty formalization, the American Board of Family Practice, by approving the report of the Committee on Requirements for Certification (CORC) which incorporated final requirements for examination of candidates for diplomate status.

There will be no grandfather clause in the board, and all applicants demonstrating eligibility must stand examination. These represent two categories, residency-eligible and practice-eligible candidates. Both must have been graduated from an AMA-approved medical school.

Residency-eligible candidates must have successfully completed the AMA-approved residency, while the practice-eligible candidates must have practiced six years or be a member of a medical school faculty. Those in practice must also have completed 300 hours of postgraduate instruction acceptable to the board.

Heading the Mississippi delegation at Dallas were Drs. John B. Howell, Jr., of Canton and

J. Roy Bane of Jackson, members of the Congress of Delegates. Drs. Eldon L. Bolton of Biloxi, Mississippi chapter president, and Max L. Pharr of Jackson, immediate past president, headed the officer contingent. Miss Louise Lacey of Jackson, MAGP executive secretary, was a convention participant.

In other actions, the Congress of Delegates:

- Endorsed "freedom of choice" in prescribing, expressing opposition to compulsory generic Rx.

- Rejected a Texas resolution which would have prohibited the Academy from accepting federal funds and reaffirmed a policy calling for "the judicious use of federal funds under the close scrutiny and guidance of the Board of Directors."

- Sought changes in the doctor draft law to eliminate discrimination against family physicians.

- Turned thumbs down on a proposal in the president's address which would have extended the chief executive's term of office.

- Refused to change the name of the organization, keeping the designation "American Academy of General Practice."

- Supported driver education for high school students.

- Took under advisement a proposal to establish a degree of membership designated as "fellow."

- Urged inclusion of physicians as voting members of hospital governing boards by endorsing the AMA position and disapproving an Ohio resolution which would have made such membership a precondition for JCAH accreditation.

- Moved to clarify the definition and description of "surgery" in the core content of training for the family practice certifying board.

- Voted to permit traveling fellowships for Academy members using extraorganizational funds.

- Encouraged family practice career recruitment by supporting GP clubs in medical schools.

- Referred to the Board a resolution asking that the Academy Board, commissions, and committees distribute summaries of their deliberations to state chapter counterparts.

- Approved a proposal to study establishment of academic fellowships to prepare physicians to become directors of family practice departments.

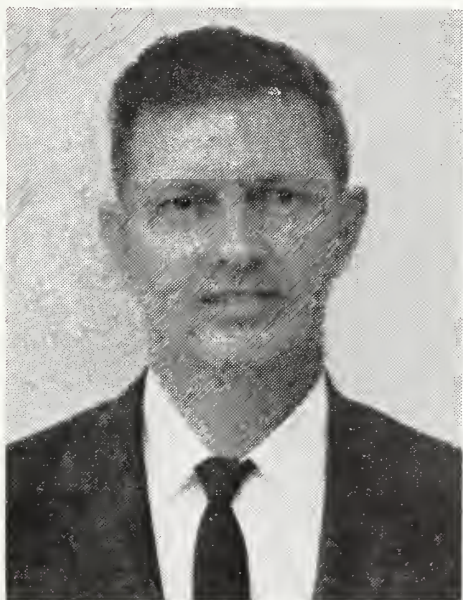
- Agree to examine the feasibility of including aviation coverage into the Academy's group insurance program.

- Authorized certificates of award for service to the Academy by members.

Dr. Howell chaired the Reference Committee on Miscellaneous Business which considered resolutions and reports on fellowships, insurance, and

In Mississippi . . .

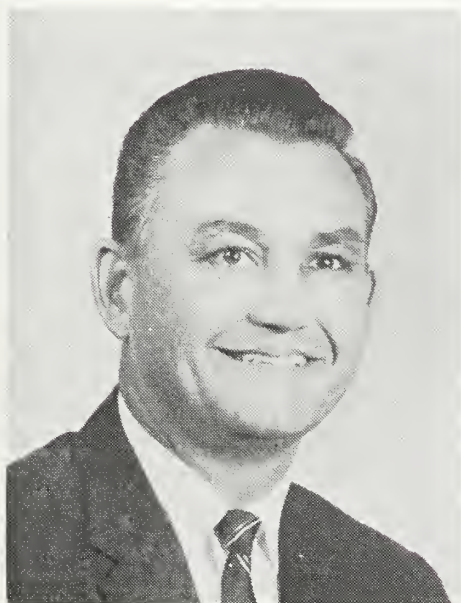
These Syntex men serve the physician



Jerome C. Harrison
Mobile, Alabama



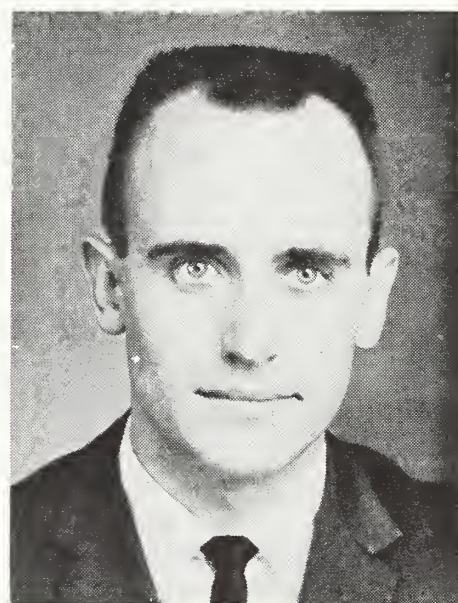
Ernest Haydel
Mobile, Alabama
342-2660



Dewey Long
Jackson, Mississippi
362-8898



Harry Payne
Memphis, Tennessee
357-4015



Robert Russell
Metairie, Louisiana
887-8492

ORGANIZATION / Continued

environmental, occupational, and school health work.

Hurricane Beulah devastated the Texas Gulf Coast just before the convention and cut deeply into attendance which was totalled at 4,672 with 2,276 physicians registered. More than 1,250 scientific and technical exhibits were presented, and a full fare of papers were heard over the three day scientific convocation.

Dr. Lotterhos was named to the Academy's Board of Directors (trustees) at the 1966 Boston convention after having served in a number of key posts. He is a former chairman of the Commission on Publications, parent body of the Academy's hefty journal, *GP*. He has been a central figure in the quest for the certifying board, having served on both Academy and AMA committees.

The new chairman is a past president of the Mississippi Academy and is incumbent speaker of the state medical association's House of Delegates, having also served as vice speaker and secretary-treasurer.

Other officers named at Dallas included Dr. Julius Michaelson of Foley, Ala., who was re-elected treasurer and three new directors, Drs. Norman Coulter of Orlando, Fla., John J. Wildgen of Kalispell, Mont., and Robert Quello of Minneapolis, Minn.

NIH Devises New Heart Valve

Surgeons of the Public Health Service's National Heart Institute have devised a heart valve replacement which combines the post-operative advantages of valve transplants (homografts) with the ease of insertion of artificial heart valves.

The new experimental device, designed by Drs. Nina S. Braunwald, James C. A. Fuchs, and Lawrence I. Bonchek of the NHI Surgery Branch, has proven highly successful in calves and promises to avoid the clotting problems occasionally encountered with artificial valve replacements.

Heart valves severely damaged by rheumatic fever are usually replaced by artificial valves, most commonly ball valves and caged disc (lens) valves constructed from plastic or metal. However, a common problem following the insertion of artificial valves has been clotting complications, which occur in 10-40 per cent of patients who survive cardiac valve replacement with such prostheses.

Artificial aortic valve replacements pose rela-

tively few clotting complications because they are continually swept clean by strong surges of blood from the contracting left ventricle. However, replacements for the mitral valve (between the left atrium and left ventricle) and the tricuspid valve (between the right atrium and right ventricle) must be installed at sites where lower blood pressures and flow velocities prevail. Under these conditions, clots can form more readily on valve surfaces. Improved valve designs and materials have helped to reduce this problem; but, even so, patients fitted with artificial mitral or tricuspid valves must usually remain on continuous anticoagulant therapy.

Clinical experience of the last four years indicates that homograft valves—specifically healthy aortic valves taken from donors dying of other causes—are almost entirely devoid of clotting complications.

However, each homograft valve must be trimmed and fitted at the time of operation and its installation is technically more difficult than is the insertion of an artificial valve. Both factors substantially increase the time required for valve installation, and hence the critical period during which the patient's heart must be stopped and his circulation maintained by the heart-lung machine.

The NHI surgeons attacked all of these problems in the design of their new prosthesis. It consists of a homograft valve—in this case, the aortic valve of a calf—supported by a specially designed thrombus-resistant prosthetic frame. The frame is composed of a base ring and three vertical struts.

Aortic homograft valves were obtained from freshly slaughtered calves, trimmed, and measured with a dilator. Prior to attaching the homograft to the frame, the investigators covered the frame and sewing ring with a highly porous fabric (60 denier polypropylene). Their earlier studies had shown that artificial valves could be made highly resistant to clot formation by covering all fixed parts with a porous fabric to promote tissue ingrowth. The valves are then attached to the metal frames and cloth-covered sewing ring is attached to the outer surface of the base ring.

Then, each mounted valve was subjected to performance tests in the transparent chamber of a pulse duplicating machine. Those valves which demonstrated satisfactory function (documented by still photographs, motion pictures, and by dye injections above the valves) were chemically sterilized and stored in a cold antibiotic solution before implantation in calves.

The availability of completely fabricated valves of fixed diameter for immediate use eliminated the need to trim and fit a valve during surgery. Fur-

thermore, the valves were simpler to install than non-fabricated homografts and could be placed at any valve site within the heart.

Following the fabrication and sterilization process, the mounted homografts were implanted in 23 calves: the tricuspid valve was replaced in 14 animals and the mitral valve in nine others. This constituted a stern test of the clot-resisting properties of the new prosthesis while also demonstrating that mounted aortic homografts could be used to replace diseased valves elsewhere in the heart.

The fabric sewing ring of the mounted homograft permitted the use of conventional interrupted suture techniques and shortened the time required for installation to roughly the same as that required for insertion of a rigid caged-ball prostheses. Each calf received penicillin and streptomycin for five days postoperatively, but no anti-coagulants were employed.

Catheterization studies one to three months following operation in 12 calves indicated complete effectiveness of the valves in 11. After the animals were killed, the autopsy examinations showed that 18 of the 21 calves had efficient valves with clean, well-supported leaflets. Failures in three were attributed to improper placement of the prosthetic struts in the earliest valves. This was later corrected and slight adjustments were also made in placement and suturing of the frame.

These experiments have shown the value of inserting aortic homograft valves supported on non-thrombogenic prosthetic frames. The design combines the clot resistance of homograft valves with the ease of insertion of caged-ball valves. It also permits the use of an aortic valve homograft in the replacement of mitral or tricuspid valves.

Pfizer Will Appeal FTC Decision

The Federal Trade Commission has announced that it had dismissed charges in a complaint issued in 1958 regarding alleged price fixing on tetracycline but reaffirmed its 1963 holding which would require Pfizer to license its tetracycline patent on a royalty-bearing basis.

A Pfizer spokesman issued the following statement:

"We are gratified that the price-fixing charges, which have been pending since 1958, have now been dismissed by the Federal Trade Commission. However, we are disappointed with the commission's decision on the patent charges. We obtained our tetracycline patent in good faith and without any impropriety. We continue to have



One by one the family's downed Because the G.I. bug's around

Parepectolin for quick relief of acute diarrhea
...soothes colicky pain with paregoric*
...consolidates fluid stools with pectin
...adsorbs irritants with kaolin,
and protects intestinal mucosa

Whether it's a 24-hour "bug", a food problem, or simply nervousness and anxiety, Parepectolin will bring the diarrhea under control until etiology can be determined. In some cases, Parepectolin may be all the therapy necessary.



Parepectolin[®]

Each fluid ounce of creamy white suspension contains:
*Paregoric (equivalent) (1.0 dram) 3.7 ml.
Contains opium (1/4 grain) 15 mg. per fluid ounce.
warning: may be habit forming
Pectin (2 1/2 grains) 162 mg.
Kaolin (specially purified) (85 grains) 5.5 Gm.
(alcohol 0.69%)
Usual Adult Dose: One or two tablespoonfuls three times daily.
Usual Children's Dose: One or two teaspoonfuls three times daily.



WILLIAM H. RORER, INC.
Fort Washington, Pa.

complete confidence in Pfizer's ultimate vindication.

"We intend to appeal the Commission's decision on the patent issues to the federal court, as we did before. Previously, the Court of Appeals in Cincinnati found that the record did not support the commission's prior holding that Pfizer had obtained its patent by misrepresentation. The Court sent the proceeding back to the commission to take the testimony of the Patent Examiner who had approved the issuance of the patent. However, the Patent Examiner in his testimony frankly admitted that he had no recollection of the events in question. He could only reconstruct what he thought had happened more than 11 years before and reconstruct what his views and reactions would have been under certain given circumstances at that time. We feel strongly that his testimony added nothing substantial to the record which the Court of Appeals had held would not sustain the commission's findings as to the patent."

Dr. Long Is Named ICS Board Chairman

The International College of Surgeons' House of Delegates has named Dr. Lawrence W. Long of Jackson chairman of the organization's Board of Trustees. The action came with elections at the recent annual session at Chicago.



Dr. Long

Dr. Long has been active in ICS, having served in many committee posts and a vice president of the United States Section. He continues to serve as chairman of the Board's Finance Committee.

In the state medical association, Dr. Long has served as a member of the Board of Trustees (then designated as the Council), as editor, vice speaker and speaker of the House of Delegates, and as president in 1962. He is a former member of the Mississippi State Board of Health.

Since its founding in 1960, Dr. Long has served as chairman of the Committee on Publications which oversees publication of the JOURNAL.

Royal Society Sponsors New Foundation

The Royal Society of Medicine Foundation has been formed to establish closer relations between members of the medical profession in Great Britain and the United States.

The new foundation, organized under the auspices of the Royal Society of Medicine, provides an opportunity for individuals, corporations, government agencies and charitable foundations in the U. S. to support medical research in Great Britain and to foster closer relationships between members of the medical profession in both countries.

Tax-deductible contributions to the foundation will be used to improve facilities for medical research and education, as well as to provide medical scholarships, to sponsor conferences for the exchange of information on medical research and to preserve medical literature.

The Royal Society of Medicine is a 13,000-member organization established in London, England, in 1805 "for the cultivation and promotion of physics and surgery and of the branches of science connected with them." Today, its worldwide membership includes over 1,000 U. S. physicians.

Activities of the Royal Society of Medicine range over the whole of the clinical and part of the pre-clinical field. Among its principal activities is maintenance of one of the largest medical libraries (500,000 bound volumes and 3,000 current periodicals) in the world, and the most comprehensive one outside the U. S.

Coast Physician Will Serve As Solon

Dr. William A. Tisdale of Biloxi will become the first physician to sit as a member of the Mississippi legislature since the late Dr. Taylor H. Henry of Columbus who died in 1952. Dr. Tisdale will serve as representative from Harrison County in Post 7.

A graduate of the Tulane University, both from its college of arts and sciences and medical school, Dr. Tisdale received his postgraduate training at Midstate Baptist Hospital in Nashville. He has both army and navy military service, having been a member of the Mississippi National Guard and on active duty with the navy during World War II.

Dr. Tisdale located at Biloxi in 1953 where he has since continually practiced. He is a member of the Coast Counties Medical Society, the state

**If you could put
Tareyton's charcoal filter
on your cigarette,
you'd have
a better cigarette.**



Of course we can't guarantee it'll smoke as smooth as a Tareyton.



New Tareyton 100's with the charcoal filter. © The American Tobacco Company

ORGANIZATION / Continued

medical association, AMA, and AAGP. In 1965, he was elected president of the medical staff at Howard Memorial Hospital.

Following his election in the August primaries, Dr. Tisdale was quoted as stating that he intends to seek establishment of a charity hospital in Harrison County.

He is married to the former Constance Hoffman and they have three sons and two daughters.

Cancer Society Holds Annual Meeting

Physicians, theologians, government officials, and patients participated in a unique program which highlighted the 1967 annual meeting of the American Cancer Society, Mississippi Division, at Jackson. The theme was the "Impact of Cancer."

One cancer patient emphasized that "we are

trained to be part of the answer, not part of the problem."

Speakers included Dr. Richard G. Burman of Gulfport; Dr. David B. Wilson of Jackson, president of the American Hospital Association and director of the University Hospital; Travis McCharen of Jackson, director of the state Division of Vocational Rehabilitation; E. Scott Baker of Jackson, representing the Social Security Administration; and Dr. Warren N. Bell of the University Medical Center.

New officials named for the state division are Dr. Guy T. Gillespie of Jackson, president; Dr. M. Beckett Howorth of Oxford, president-elect; Charles K. Pringle of Biloxi, chairman of the board; and Dr. Arthur E. Brown of Columbus, chairman of the executive committee.

Other officers include Dr. James P. Spell of Jackson, first vice president; William Farlow, R.Ph., of Jackson, secretary; Charles Bailey of Jackson, treasurer; three district vice presidents, Mrs. J. T. Latham of Eupora, Mrs. Billie Boyce of Yazoo City, and Dr. Glen T. Pearson of Hattiesburg.



New officers of the American Cancer Society, Mississippi Division, are, seated from the left, Dr. M. Beckett Howorth of Oxford, Dr. Guy T. Gillespie of Jackson, and Charles K. Pringle of Biloxi. Standing from the left are Dr. Glen T. Pearson of Hatties-

burg, Mrs. Billie Boyce of Yazoo City, Dr. Arthur E. Brown of Columbus, Charles Bailey of Jackson, Dr. James P. Spell of Jackson, William Farlow of Jackson, and Mrs. J. T. Latham of Eupora.

Dear Doctor:

Wouldn't you like your patients to learn more about the contributions made by the world of medicine to their welfare? So that they can better appreciate the efforts of the health team to keep them in good health?

To tell the stories of medical and pharmaceutical advances to people throughout the country, the Pharmaceutical Manufacturers Association is sponsoring a unique "magazine within a magazine." It is called *Medicines and your family's health* and the next issue appears in the November *Reader's Digest*.

We would like to send you 50 free reprints of *Medicines and your family's health* for use in your reception room. Your patients will find the articles in this issue factual, educational and of immediate personal interest.

Just fill out the coupon below and send it to us.

Order Desk
Pharmaceutical Manufacturers Association
1155 Fifteenth St., N.W.
Washington, D. C. 20005

Gentlemen:
Please send me 50 free copies of
Medicines and your family's health.

Name _____

Street _____

City _____ State _____ Zip _____

Why have many dread diseases
vanished? ... What's in a drug name?
... What are the drugs that
reach troubled minds? ... Where are
prescription drug prices going?

Medicines and your family's health

2 4 6 8

CONTENTS
What Ever Became of Those Quarantine Signs?
The Anonymous Drug That Hospitalized a Patient
Medicines for the Troubled Mind
How Does the Price of Medicine Compare with Other Prices?
Reprinted from the November, 1967 issue
of The Reader's Digest

Jackson Chamber Honors Dr. Hendrick

Dr. Jim G. Hendrick, Jackson pediatrician, has been named "man of the month" by the Jackson Chamber of Commerce for the fourth time in 1967. He is the chamber's leading producer of new memberships, according to spokesmen for the 2,600-member business, professional, and civic organization.

A leader in the Committee on Membership and Finance, Dr. Hendrick has secured 25 new memberships during the current year. The committee's goal of 300 new members in 1967 is within reach with 274 having been secured through the first three quarters of 1967.

The Jackson Chamber of Commerce carries the accolade of accreditation conferred by the Chamber of Commerce of the United States. Physicians are well represented on its rolls.

NABSP Supports Private Sector in Medicare

The National Association of Blue Shield Plans said today that complications in the Medicare and Title XIX programs can be lessened through greater use of the private sector.

The association's views on the two government-financed health care programs were presented by Dr. Ira C. Layton, vice chairman of the board of NABSP, in testimony before the Senate Finance Committee in Washington, D. C., on H.R. 12080, the Social Security Amendments of 1967.

Dr. Layton, a practicing physician in Kansas City, Mo., pointed out that a "comprehension gap" on Medicare still exists. He added that every effort must be made to simplify the program through administrative changes and greater use of the experience and capabilities of the private carriers involved in the program.

Observing that a recently implemented Title XIX program is being purchased from one of the plans with federal-state funds, Dr. Layton said he believed that Blue Shield was beginning to be used to its fullest extent under this program. He urged a continuation of this trend, explaining:

"Only in this way can Blue Shield plans serve the public under government programs with the

same degree of efficiency, economy, and satisfaction that we have achieved in serving our more than 60 million regular subscribers."

Thirty-three Blue Shield plans are now serving as Part 1-B carriers under Medicare for 60 per cent—about 10 million—of the aged beneficiaries. These plans are processing Medicare claims at a rate of 30 million bills a year.

Under the federal-state Title XIX program, 12 Blue Shield Plans are involved. They are processing claims at a rate of 25 million bills a year.

Appearing with Dr. Layton before the Committee were John W. Castellucci, President of the Association, and John C. McCabe, President of Michigan Blue Shield, a Part 1-B Medicare carrier, and co-chairman of the Part 1-B Carrier Advisory Group.

Jets Threaten Spread of Cholera

Cholera, an ancient communicable disease, once again poses a threat to the United States and other western countries because of rapid international travel.

Details of the cholera threat to the western world are described in the *Journal of the American Hospital Association*, by Dr. Eugene J. Gangarosa of the U. S. Public Health Service's Communicable Disease Center in Atlanta, Ga.

Cholera has spread throughout Southeast and South Asia, penetrating as far west as Iraq in the Middle East since the pandemic of 1960 in Indonesia. Dr. Gangarosa considers the speed of international jet airliner travel a major factor in the spread and exposure of this disease.

The Public Health Service official warns that the five-day incubation period of cholera allows the international traveler to return home several days before the disease becomes clinically apparent. Symptoms range from the most apparent, massive dehydration and collapse, to mild diarrhea that is not incapacitating in any way. In some cases, Dr. Gangarosa points out, a carrier of the disease may have no symptoms. "It is important at this time, particularly in cities that are focal points for international traffic, to subculture routinely for cholera vibrios stool specimens from patients with gastroenteritis who recently have visited cholera-infected areas," he said.

Although only two cases of cholera have been reported in the United States since 1911, travelers to infected areas are advised to receive vacci-

nations. "The standard vaccination procedure requires two inoculations, with an interval of at least seven days between the two," Dr. Gangarosa stated. Because the period of immunity is short and the degree of protection is limited, a booster dose should be obtained at six-month intervals as long as there is danger of infection, he explained.

Studies and experiments with different types of vaccine are being carried out in cholera-infected areas to determine the best vaccine that will provide the longest duration of protection. Studies are being conducted by the National Communicable Disease Center of the Public Health Service in East Pakistan at the SEATO Cholera Research Laboratory and by Japanese and Filipino investigators in the Philippine Islands.

Fourth Decade Fertility Study Is Reported

Many women remain fertile into their 40s—even 50s—but the risks of miscarriages, Cesarean hysterectomies, and other pregnancy complications increase markedly in these later years. Yet today, despite advancements in contraceptive techniques, over 15 women per thousand in the United States still become pregnant past the age of 40.

These findings were reported by Dr. Ben Z. Taber, medical director of Syntex Laboratories, during the 15th Annual Meeting of the Pacific Coast Fertility Society.

Dr. Taber based his remarks on a recent 18-month study of more than 3,400 deliveries at the Palo Alto-Stanford Hospital, Palo Alto, Calif. Together with his Syntex colleague, Dr. M. O. Greaney, he compared the success of pregnancies by mothers under 38 with those over 38.

"The dividing line of 38 was chosen in lieu of 40," said Dr. Taber, "because women reluctant to face the reality of age 40 tend to remain 38 or 39 longer than the usual 12 months."

Dr. Taber explained that the study was prompted by a dearth of information about fertility during later reproductive years. Prior studies pointed mainly to the relationship between advancing age and maternal mortality, but revealed little about the effect of age on obstetrical complications.

Although no maternal deaths occurred during the 18 months, Dr. Taber said, "It was apparent that the risk of pregnancy is very real in the first half of the fifth decade for many women."

In the "over 38" group, miscarriages and/or abortions were three to four times as prevalent as

among the total obstetrical population. The incidence of Cesarean section was almost double.

Ten per cent of those over 38 were pregnant for the first time. The oldest patient in the group was 45, but Dr. Taber cited a report published in 1966 of the pregnancy complication, hydatidiform mole in a woman aged 57.

Insurance Industry Gives to Medical Research

Grants and fellowships totalling nearly \$1.5 million have been awarded this year by the Life Insurance Medical Research Fund.

The fund, which is supported by 138 life insurance companies in the United States and Canada, has distributed nearly \$22 million since it was organized in 1945.

James F. Oates, Jr., chairman of the board for the fund, notes in the annual report that four of the scientists who have been aided by its grants have also been awarded Nobel Prizes.

Oates, who is chairman of the board of the Equitable Life Assurance Society, said that many of the other scientists aided by the fund have produced "a great wealth of new knowledge which has led to the development of new techniques for both research and treatment in the future." Much of the fund's emphasis has been on basic research, chiefly in heart disease.

MSMA Building Architect Dies

Jay T. Liddle, Jr., of Jackson, the architect who designed the state medical association's headquarters building, died suddenly on Oct. 3 after one day's hospitalization. He was 61 years old.

Liddle was a member of the American Institute of Architects and a past president of the A.I.A. state chapter in Mississippi. He had a particular interest in design of medical facilities, and he had designed a number of physicians' clinic buildings and hospitals. In 1957, a year after completion of the association's building at 735 Riverside Drive in Jackson, Liddle received the A.I.A. award for the best building design in the classification on the MSMA project.

He was a graduate of the Tulane University and served during World War II as a Lt. Commander in the U. S. Navy. He is survived by his wife and three daughters.

Anticancer Drug Potentiation Is Reported

A team of Upjohn Company scientists has discovered a way to increase the effectiveness of an experimental drug used to treat some types of cancer and virus diseases by blocking its breakdown within the body, they reported to the 154th National Meeting of the American Chemical Society here today.

The drug, cytarabine, has been used experimentally to treat leukemia and herpes keratitis, but its value has been limited by transformation within the body before it can complete its work of destroying cancer or viral cells.

This breakdown, according to Drs. Gerald W. Camiener and Arthur R. Hanze, is caused by the enzyme deaminase. Now, they and other Upjohn scientists have discovered three enzyme inhibitors, substances which are not active themselves against cancer or viral cells but which prevent the transformation of cytarabine into another, inactive

compound. In this way, these new substances may extend the value of cytarabine in the treatment of leukemia, herpes and other viral diseases.

Dr. Camiener discovered in 1965 that deaminase, found in the liver as well as other tissues, was the substance that limited the effectiveness of cytarabine. The process of deamination, he found, transformed the drug to a biologically inactive compound called ara-uridine.

This discovery stimulated an interdisciplinary search by teams of Upjohn scientists to find substances which would, in turn, counter the action of deaminase. At the A.C.S. meeting, Drs. Camiener and Hanze reported that three compounds inhibit the deamination process, both in the test tube and experimentally in dogs.

Chemically, the three new enzyme inhibitors are N-4-hydroxypyrimidine nucleoside, an acridine derivative, and tetrahydrouridine. Of the three, tetrahydrouridine appears the most promising, since it possesses 300 times the deamination inhibiting activity of the other two compounds.

Oddly, all three compounds are conformationally similar, the investigators said. But all three apparently possess different modes of action. Tetrahydrouridine regulates rather than prevents the formation of deaminase, indicating it may occur

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205-836-7201

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 42 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL:

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

naturally in the body, Dr. Camiener said. The other two compounds actually inhibit the action of the enzyme, either by forming a chemical complex with cytarabine or by competing with it for deaminase.

In any case, all three show promise in the test tube and in animals of enhancing the value of cytarabine. However, the investigators emphasized, much careful testing remains before the effectiveness can be established of one or another of these enzyme inhibitors along with cytarabine in the treatment of human leukemias and viral diseases.

NOLA Slates Pulmonary Session

The 1967 Fourth Annual Postgraduate Course on Pulmonary Function in Health and Disease to be held in New Orleans, Louisiana, will be conducted Dec. 4-7. The auditorium of the Louisiana State University School of Medicine in New Orleans' medical complex will be the site.

1967 sponsors for the high-level continuous education event remain the American Thoracic

Society, the Tulane University School of Medicine, the Louisiana State University School of Medicine, the Alton Ochsner Medical Foundation, and the Louisiana Thoracic Society. The LTS is the coordinating agency for the course.

According to course chairman, Dr. Hurst B. Hatch, Jr., the 1967 Guest Faculty features five scientist physicians including Dr. André Cournand, emeritus professor, Medical College of Physicians and Surgeons, Columbia University, New York City. Dr. Cournand is also slated to deliver "The Second Annual Louisiana Thoracic Society Lectureship" the afternoon of Dec. 5, a segment of the Course open to all interested and able to attend.

Other guest faculty members will include Dr. Marshall H. Klaus, professor, Western Reserve University School of Medicine, Cleveland, Ohio; Dr. George W. Wright, head, Medical Research Department in the Division of Internal Medicine, Saint Luke's Hospital, Cleveland, Ohio; and Dr. William A. Briscoe, associate professor, Medical College of Physicians and Surgeons, Columbia University, New York City.

Tuition for the course is \$100 for all physicians. Members of the American Thoracic Society receive a \$25 discount. Interested nurses and tech-

New DISPETTE™ Single dose disposable units

- No measuring—no droppers—no bottles
- Full dosage without waste or spillage
- Space-saving refrigerator package
- Practical and economical

Poliovirus Vaccine Live, Oral, Trivalent

ORIMUNE®



CONTRAINDICATIONS and PRECAUTIONS: Do not inject this vaccine. Postpone vaccination in those with acute illness; in any condition having an adverse effect on the immune response mechanism (leukemias, lymphogenous diseases, dysgammaglobulinemias, during treatment with immune serum globulins or with cancer chemotherapy agents, etc.); in advanced debilitated states; or if there is persistent vomiting or diarrhea, or clinical signs of virus (including enterovirus) infection.

Live measles and oral poliovirus vaccines should probably be given separately.

SIDE EFFECTS of significance have not been reported. However, the risk of vaccine-induced poliomyelitis, estimated to be from 1:2,500,000 to 1:50,000,000 should be considered.

Supplied in trays of 10. Order through your Lederle Representative or regular source of supply.



447-7-4964

ORGANIZATION / Continued

nicians' tuition is \$25. The course is limited to 150, and application for registration should be made through the Louisiana Thoracic Society, 305 Baronne Street, New Orleans, La. 70112; Attention: Findley Raymond, Course Coordinator.

Hotel accommodations, entertainment information and other such data are also available from the same address.

AHA, NU Found New Study Center

Northwestern University and the American Hospital Association's Hospital Research and Educational Trust have joined to establish a unique center for study of the economic and other aspects of health care.

Establishment of the new Health Services Research Center has been announced by Northwestern president Dr. J. Roscoe Miller and Dr. David B. Wilson, president of both the AHA and HRET.

Development of "cost-reducing methods of reorganizing the delivery of services in hospitals and other providers of health services" was recommended by the Department of Health, Education, and Welfare in its Report to the President on Medical Care Prices, published earlier this year. This is the first such center to be established.

The center will conduct and stimulate research on such problems as staffing, financing, planning, organization, administration, and evaluation of health services.

Members of the center staff will hold faculty appointments at Northwestern as well as HRET appointments. The staff is expected to include faculty members in the fields of economics, sociology, political science, medicine, nursing, operations research, demography, and management. The staff may be augmented by "sabbatical scholars" working on center projects.

HRET is located in the AHA headquarters, 840 N. Lake Shore Dr., on the northern edge of Northwestern's downtown campus.

"We feel that the Health Services Research Center will be an exciting and important activity, and will provide an opportunity for two organizations to work together in tackling one of the major problems facing the country—the delivery of health services," Dr. Miller said.

Dr. Wilson, also director of University Hospital in Jackson, Miss., called the establishment of the center "a breakthrough that has been needed in the health field. The program should interest other universities in starting health research programs."

John A. D. Cooper, Northwestern dean of sciences, will serve as chairman of the executive committee, which will nominate a center director in the early fall. Colin W. Churchill, HRET director, will serve as secretary of the executive committee.

CPI Shows Drug Price Decrease

The U. S. Department of Labor has disclosed that its Consumer Price Index for prescription drugs dropped one-and-a-half per cent in the first six months of this year to a record low of 88.8.

This means that drugs which cost five dollars in the 1957-59 base period of the index were down to \$4.40 by the middle of 1967.

During the same period the index measured a 16 per cent increase in "all items" of consumer purchases.

The latest drop in drug prices is attributable to substantial reductions by manufacturers, wholesalers and retailers in the prices of antibiotics, down 8.1 per cent in the past 12 months and 31.9 per cent since 1960.

Hub City Med Senior Receives Fellowship

James Green of Hattiesburg, a senior at the University of Mississippi School of Medicine, has become the first recipient of the DePuy-Holy Fellowship in Orthopaedic Surgery. The new fellowship was established by the DePuy Manufacturing Co. during 1967.

The grant, according to Dr. Robert E. Carter, dean and director of the medical center, will enable a second, third, or fourth year student to be assigned to orthopaedic surgery during two months in the summer each year. It carries a stipend of \$550 for the period in the first year and \$600 during the second year.

Awardees will be assigned to the Department of Orthopaedic Surgery and in addition to working on the service, they will be expected to participate in research.



TRUSTEES, COUNCILS, AND COMMITTEES

■ BOARD OF TRUSTEES

JOHN B. HOWELL, JR., Canton, Chairman (1968)
LAMAR ARRINGTON, Meridian, Vice Chairman (1968)
C. D. TAYLOR, JR., Pass Christian, Secretary (1969)
JOHN M. ALFORD, JR., Greenwood (1970)
JAMES O. GILMORE, Oxford (1970)
J. T. DAVIS, Corinth (1970)
MAL S. RIDDELL, JR., Winona (1968)
W. E. MOAK, Richton (1969)
G. SWINK HICKS, Natchez (1969)

■ COUNCIL ON BUDGET AND FINANCE

J. T. DAVIS, Corinth, Chairman (1968)
GEORGE D. PURVIS, Jackson (1969)
DANIEL L. HOLLIS, Biloxi (1970)

■ COUNCIL ON CONSTITUTION AND BY-LAWS

E. LEROY WILKINS, Clarksdale, Chairman (1969)
RAYMOND S. MARTIN, JR., Jackson (1968)
ARTHUR E. BROWN, Columbus (1970)

■ JUDICIAL COUNCIL

E. LEROY WILKINS, Clarksdale, Chairman (1968)
R. L. WYATT, Holly Springs (1968)
T. N. BRADDOCK, JR., West Point (1968)
PAUL B. BRUMBY, Lexington (1969)
WILLIAM B. WIENER, Jackson (1969)
OMAR SIMMONS, Newton (1969)
J. P. CULPEPPER, JR., Hattiesburg (1970)
LEO J. SCANLON, Natchez (1970)
JAMES T. THOMPSON, Moss Point (1970)

■ COUNCIL ON LEGISLATION

JAMES G. EGGER, Drew (1968)
JAMES O. GILMORE, Oxford (1968)
FRANK M. DAVIS, Corinth (1968)
PAUL B. BRUMBY, Lexington (1970)
GEORGE E. TWENTE, Jackson (1970)
GUY T. VISE, Meridian (1970)
A. T. TATUM, Petal (1969)
A. V. BEACHAM, Magnolia (1969)
ELDON L. BOLTON, Biloxi (1969)

■ COUNCIL ON MEDICAL EDUCATION

WM. O. BARNETT, Jackson, Chairman (1968)
DENNIS E. WARD, Corinth (1969)
R. MAYO FLYNT, Meridian (1970)

■ COUNCIL ON MEDICAL SERVICE

GUY T. VISE, Meridian, Chairman (1968)
JOHN G. CADEN, JR., Jackson, Vice Chairman (1968)
GEORGE F. ARCHER, Greenville (1969)
JAMES O. GILMORE, Oxford (1969)
JACK M. SENTER, Belmont (1969)
PAUL B. BRUMBY, Lexington (1968)
CHARLES R. JENKINS, Laurel (1970)
JACK A. ATKINSON, Brookhaven (1970)
BEDFORD F. FLOYD, Gulfport (1970)

■ EDITORIAL COUNCIL

W. MONCURE DABNEY, Crystal Springs, Editor (1969)
GEORGE H. MARTIN, Vicksburg, Associate Editor (1968)
THOMAS W. WESSON, Tupelo, Associate Editor (1969)

■ COUNCIL ON SCIENTIFIC ASSEMBLY

WALTER H. SIMMONS, Jackson, Chairman (1970)
JOHN E. GREEN, Hattiesburg, EENT (1968)
EMMETT M. HERRING, JR., Hattiesburg, EENT (1968)
CHARLES R. JENKINS, Laurel, GP (1968)
HARDY B. WOODRIDGE, JR., Jackson, GP (1968)
WM. C. KELLUM, Tupelo, Medicine (1968)
C. RALPH DANIEL, JR., Jackson, Medicine (1970)
JOHN E. LINDLEY, Meridian, Ob-Gyn (1968)
J. PURVIS McLaurin, JR., Oxford, Ob-Gyn (1969)
CHARLES P. THARP, Tupelo, Pediatrics (1968)
WM. F. SISTRUNK, Jackson, Pediatrics (1970)
RHEA L. WYATT, Holly Springs, Preventive Medicine (1968)
FRANK J. MORGAN, JR., Jackson, Preventive Medicine (1969)
RAYMOND S. MARTIN, JR., Jackson, Surgery (1968)
CARL D. BRANNAN, Jackson, Surgery (1970)

Mississippian Gets AMA Council Post

The Board of Trustees of the American Medical Association has announced the appointment of Dr. William E. Lotterhos of Jackson as a new member of the Council on Scientific Assembly. He succeeds the late Dr. Eugene I. Baumgartner of Oakland, Md.

The 10 member body oversees scientific activities of the AMA, including the programs at the annual and clinical conventions. Active in AMA, Dr. Lotterhos has recently been serving as a member of the *Ad Hoc* Committee on Family Practice, representing AMA in the organization and development of the pending certifying board for family physicians.

PMA Offers Total Quality Guidelines

The Pharmaceutical Manufacturers Association has announced new guidelines defining "total" quality control in prescription drug research and production.

In making the announcement, PMA President C. Joseph Stetler said that the adoption of the guidelines was a "voluntary step" taken by the association's board of directors in its "continuing efforts to provide the American public with the highest quality of medicines available."

PMA has consistently stressed the meticulous attention devoted by reputable pharmaceutical manufacturers to quality control. As an example Stetler explained that prescription drug producers employ more than 7,000 persons—one of every six production workers in their manufacturing plants—in quality control programs costing more than \$74 million annually.

The new guidelines mark the second significant step towards self-regulation taken by the industry in recent weeks. Recently, PMA announced a comprehensive new "Code of Fair Practices" covering the advertising and promotion by its member firms of their prescription products.

Stetler said that the guidelines announced today replace earlier "Principles of Control of Quality in the Drug Industry" adopted by PMA in 1961. It was those principles which the Food and Drug Administration in large measure used in preparing its 1963 regulations on "Good Manufacturing

Practices" (GMP). The GMP regulations, issued in accordance with the 1962 drug amendments, have served as an official governmental description of the practices currently employed by reliable companies.

HIAA Pledges Adequate, Effective Coverage

The two-class system of health care can no longer be tolerated in the United States.

So said J. F. Follmann, Jr., director of information and research, Health Insurance Association of America, addressing the Eastern Leadership Conference of the Health Insurance Council.

"In the latter half of the 20th century we, in the United States, are unanimously devoted to the concept that availability of, or access to, health care services of good quality is a right of every person," he told the conference during a panel discussion.

He told the insurance men that they should continually reappraise their role in financing health care.

"Insurance companies," he said, "should pay particular attention to their products, sales, and underwriting techniques to assure that the needs of the public for health insurance protection are fulfilled as completely and effectively as possible.

"They should continue to review their practice with respect to the adequacy and soundness of health insurance benefits," he added.

Follmann said insurers must remain alert to the public demands of both individual and group purchasers, including those for whom collective bargaining plays a decisive role.

Memorial Library Will Honor Dr. Snavelly

The first chairman of the University Medical Center's department of medicine, the late Dr. John Robert Snavelly, will be memorialized with creation of a departmental library which will bear his name. The project is being headed by faculty members, physicians, and former students of Dr. Snavelly.

The honoree came to UMC in 1955 with the establishment of the medical school and died, following a long illness, in 1964. UMC spokesmen said that contributions for the Snavelly Memorial Fund are now being received.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 26-29, 1967, Houston, Texas; Annual Convention, June 16-20, 1968, San Francisco, Calif. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southern Medical Association, Nov. 13-16, 1967, Miami Beach, Fla. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 100th Annual Session, May 13-16, 1968, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September, and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. William E. Riecken, Jr., P. O. Box L, Kosciusko, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.

Index to Advertisers

In accepting advertising for publication, the JOURNAL has exercised reasonable precaution to insure that only reputable, factual advertisements are included. Nevertheless, claims made by advertisers in behalf of goods, services, and medicinal preparations, apparatus or physical appliances are understood to be those of the advertiser. Neither sanction nor endorsement of such is warranted, stated, or implied by the association.

	Page
Abbott Laboratories	
16, 17, 18, 664A, 664B, 664C, 664D, 664E, 664F	
American Tobacco Co.	685
Appalachian Hall	672
Blue Cross	8, 9
Bristol Laboratories	4, 666, 667
Burroughs Wellcome	680B
Campbell Soup	660A
Continental Assurance Co.	11
Dorsey Laboratories	663, 679
First Federal of Jackson	27
Geigy Pharmaceuticals	
660D, 660E, 668, 668A, 668B, 680A	
Highland Hospital	674
Hill Crest Hospital	690
Hynson, Westcott, and Dunning	3
Kay Surgical	26
Lederle Laboratories	10, 19, 672, 691
Eli Lilly	
Front cover, 24, 660F, 660G, 660H, 688B, 688C, 688D	
National Drug Co.	688A
Parke, Davis and Co.	2
Pharmaceutical Manufacturers Assn.	687
Philips Roxane Laboratories	22, 23
Pitman-Moore	20, 21
William P. Poythress	6, 7, 14D, 670
A. H. Robins Co.	insert facing 18, 668B
Roche Laboratories	back cover
William H. Rorer	683
Sandoz Pharmaceuticals	14B, 14C, 14D
G. D. Searle	660B, 660C
Stuart Co.	15
Syntex Laboratories	
680C, 680D, 680E, 680F, 680G, 680H, 681	
Winthrop Laboratories	677
Thomas Yates and Co.	11

END BATTERY REPLACEMENTS Newest Welch Allyn

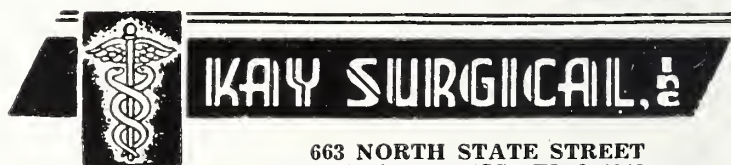
RECHARGEABLE HANDLE

Fits all WA
medium-handle
set cases

- Provides satisfactory illumination longer between charges than standard medium batteries.
- No separate charger.
- Cannot overcharge.
- May be recharged thousands of times.
- Will never corrode.
- Fits all WA instruments.

No. 717 Rechargeable battery handle\$20.00
No 717-B Extra bottom section 14.50

Also available as part of combination sets.



Wanted: One Internist and one General Practitioner to join group in Dallas. Excellent facilities and working conditions. Hospital Staff privileges available at overhead 90-bed private, accredited hospital and two major hospitals nearby. Located in residential area near Freeway, seven minutes from downtown. Salary first year and then percentage. Contact G. T. Woodard, M.D., 120 North Madison, Dallas, Texas, or call collect 214-946-5191.

PROGNOSIS PERFECT

The young intern was examining a patient in the geriatrics clinic.

Giving the patient his opinion, he said, "Mrs. Smith I can find nothing wrong, and I think that you should live to be 80."

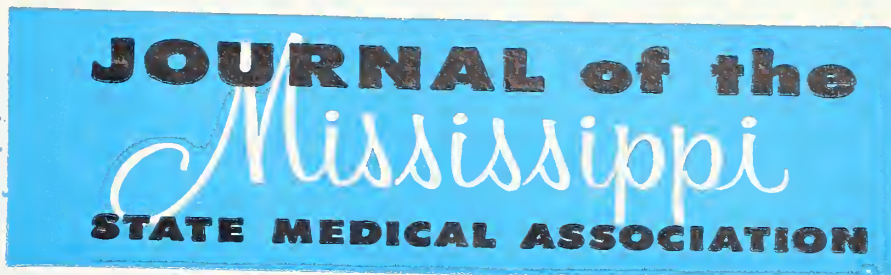
"But, doctor," responded the patient, "I am 80."

"See?" he said. "What did I tell you!"

Volume VIII

Number 12

December 1967



• EDITOR

WILLIAM M. DABNEY, M.D.

• ASSOCIATE EDITORS

GEORGE H. MARTIN, M.D.

THOMAS W. WESSON, M.D.

• MANAGING EDITOR

ROWLAND B. KENNEDY

• EDITORIAL CONSULTANT

BETTY M. SADLER

• PUBLICATIONS COMMITTEE

LAWRENCE W. LONG, M.D.

Chairman

B. B. O'MARA, M.D.

WILLIAM E. LOTTERHOS, M.D.

and the Editors

• THE ASSOCIATION

TEMPLE AINSWORTH, M.D.

President

JOSEPH B. ROGERS, M.D.

President-elect

WALTER H. SIMMONS, M.D.

Secretary-Treasurer

WILLIAM E. LOTTERHOS, M.D.

Speaker

JAMES L. ROYALS, M.D.

Vice Speaker

ROWLAND B. KENNEDY

Executive Secretary

CHARLES L. MATHEWS

Assistant Executive Secretary

CONTENTS

ORIGINAL PAPERS

Infectious and
Allergenic
Conditions of the
Eye, Nose and
Throat

695 SAM H. SANDERS, M.D.

Leukocyte Alkaline

Phosphatase **704** LEONARD C. HIGGINS, JR., M.D.

SPECIAL ARTICLES

Radiologic Seminar

LXVIII **700** ORREN W. HYMAN, JR., M.D.

Experiences in
a Coronary Care
Unit in a Small

Community Hospital **708** WILLIAM H. ROSENBLATT, M.D.

EDITORIALS

Deck the Halls
With Flash-Burned

Fingers **713** Tragedy of Fireworks

Legalize Cultism?

Let's Say 'No' Again! **716** Ugly Danger to Health

More RN's for

Mississippi **716** More and Better Nurses

Closeted Skeletons

in Auto Safety **717** Cadavers for Crashes

THIS MONTH

The President

Speaking **712** The Physician's Loyalty

The Literature **725** New Books Reviewed

Medical

Organization **727** TV for the 100th

Meetings **711** Schedules for '68

Annual Volume

Index **737** Articles, Authors, Subjects

Copyright 1967, Mississippi State Medical Association

The JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION is owned and published by the Mississippi State Medical Association, founded 1856. Editorial, executive, and business offices, 735 Riverside Drive, Jackson, Mississippi 39216; office of publication, 1201-5 Bluff Street, Fulton, Missouri 65251. Subscription rate, \$5 per annum; \$1 per copy, as available. Advertising rates furnished on request. Second-class postage paid at the post office at Fulton, Missouri.

Oral Exam Leaflet Is Available

Reprints of an article which describes a simple but effective procedure for examining the mouth are now available to interested physicians and dentists. Called "Examination of the Mouth," the pamphlet is illustrated with 24 figures, 14 of them in color, and contains nine case reports. Authors are Drs. William L. Ross, Robert H. Johnson, and Richard L. Hayes, who stress the value of such examinations in detecting a variety of diseases, including malignancies.

Single copies of the article are free upon request from Information Services, Cancer Control Program, Public Health Service, 4040 North Fairfax Drive, Arlington, Virginia 22203.

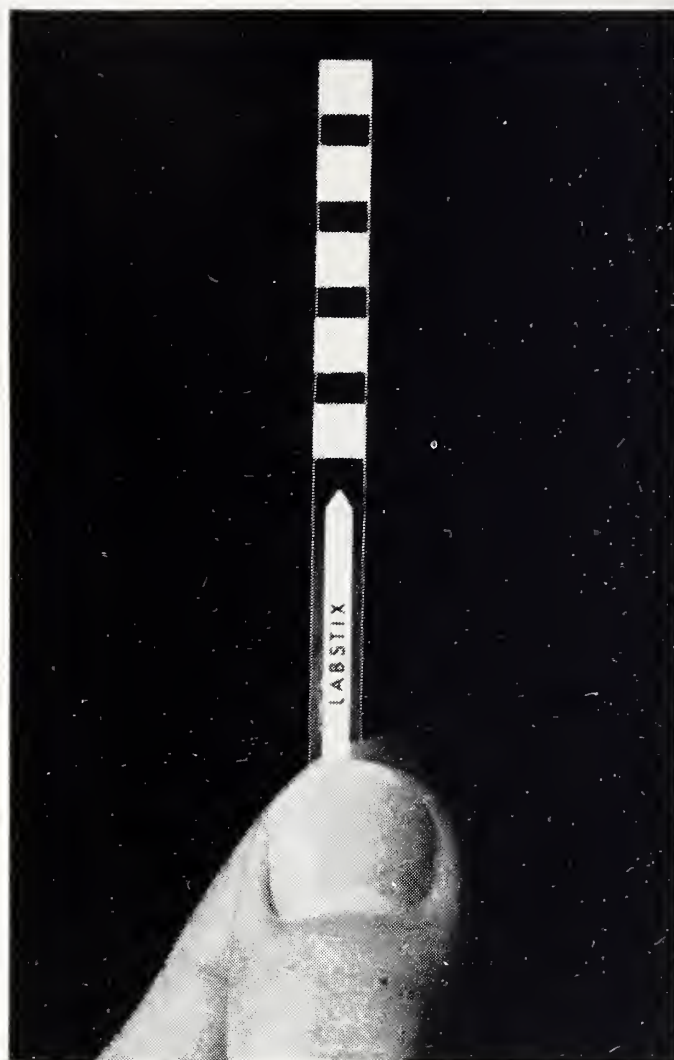
PHS, Uganda Work on CA Project

Certain types of cancer common in Africa and of theoretical and practical interest to U. S. cancer scientists will be studied intensively under the terms of a research contract recently signed by U. S. Public Health Service and African medical authorities.

The study, a cooperative venture by the National Cancer Institute, National Institutes of Health and Makerere University College in Kampala, Uganda, is expected to take four years. Public Health Service support for the first year is \$65,258.

Selected patients with lymphomas will be hospitalized at a new treatment center being established with Public Health Service assistance at Makerere University College. Particular study will be given to African children with Burkitt's lymphoma, which occurs rarely in the United States and may bear a relationship to the most frequently occurring cancer of American children, acute leukemia. Patients with Hodgkin's disease and Kaposi's sarcoma will also be studied.

The responses of African patients to drug treatment and stimulation of their immune systems will be measured and compared with responses of American patients being treated at the Clinical Center, National Institutes of Health. Immune reactions and characteristics of blood and bone marrow will be evaluated in an effort to discover why many African patients seem to respond better to drug therapy than American patients. Findings will be correlated with an ongoing National Can-



Take five...

LABSTIX® provides 5 important urinary findings*—on a single reagent strip! That's *more* information than you can get from any other single reagent strip. You know the results in just 30 seconds—while the patient is still in your office—and readings are reliable and reproducible. LABSTIX is easy to handle, too. Never goes limp, even when wet, because it's made with clear, firm plastic. And results with LABSTIX are easy to read—color contrast between the test areas and the transparent plastic is clearly defined. An unexpected "positive" from testing with LABSTIX may help in detecting hidden pathology before marked symptoms are manifest.

*Blood; ketones; glucose; protein, and pH.

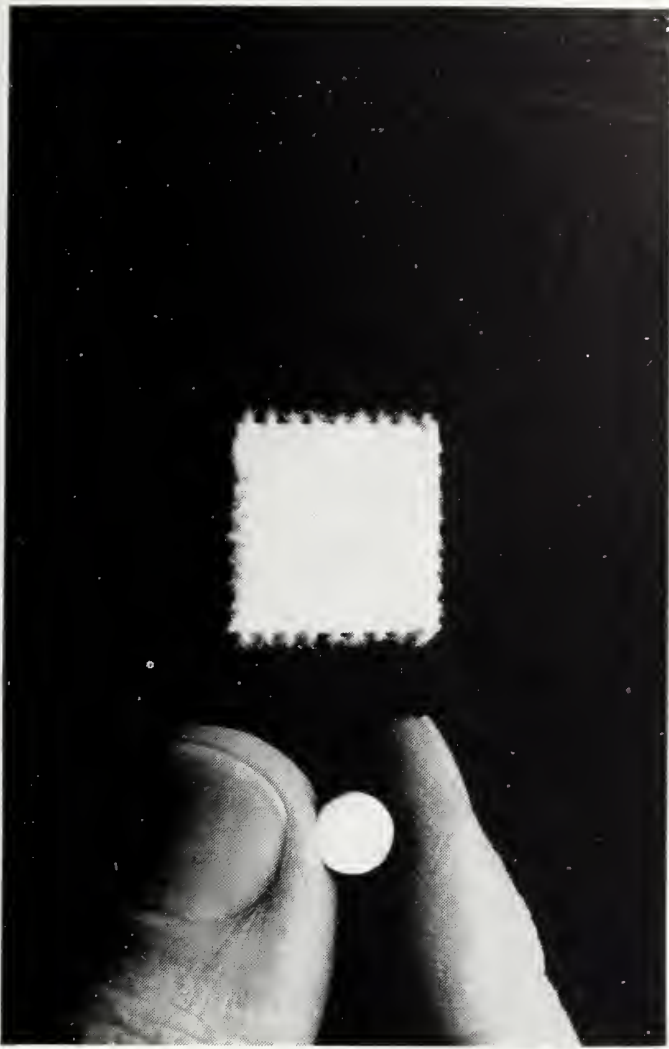
AMES COMPANY
Division Miles Laboratories, Inc.
Elkhart, Indiana 46514



Ames

Note: AMERICAN HOSPITAL FORMULARY SERVICE
CATEGORY NUMBER 36:88

40167



...Plus one

You can extend your testing scope by including ICTOTEST® Reagent Tablets, the 30-second determination for bilirubinuria—which can be an early sign of obstruction of the common bile duct, infectious hepatitis, or other liver disease. This test is also useful for detecting liver damage from carbon tetrachloride and other halogenated hydrocarbons used as industrial and household solvents. Positive findings with the urine-testing team of LABSTIX and ICTOTEST can represent significant guides to patient management in many clinical situations. "Negatives" may help rule out suspected abnormalities over a broad clinical range and are important for the patient's record.

AMES COMPANY
Division Miles Laboratories, Inc.
Elkhart, Indiana 46514



Note: AMERICAN HOSPITAL FORMULARY SERVICE
CATEGORY NUMBER 36:88

40167

cer Institute study of environmental and genetic factors that may affect an African's development of lymphoma and his response to treatment.

It is hoped that the study will lead to more effective treatment of U. S. patients with lymphoma and related types of cancer.

Project director in Africa is Professor Sir Ian McAdam, Professor of Surgery at Makerere University College, with Mr. Sebastian Kyalwazi, Senior Surgical Consultant to Mulago Hospital, Kampala as a principal investigator. Project officer for the National Cancer Institute is Dr. Paul P. Carbone, Head of the Institute's Solid Tumor Service. Dr. John L. Ziegler, a clinical associate of the National Cancer Institute, is now serving in Kampala as a consultant to the project.

Syntex Markets Sequential Pill

Norquen, a low dose oral contraceptive for sequential therapy, is being introduced by the Pharmaceutical Division of Syntex Laboratories.

Norquen Tablets provide an oral contraceptive regimen consisting of 14 white tablets (mestranol 0.08 mg.) followed by six blue tablets (norethindrone 2 mg. and mestranol 0.08 mg.). Norethindrone, an original Syntex steroid, is a well-established progestational agent.

The new product has proved effective in extensive studies and a low incidence of side effects has been associated with it. Little weight change has been noted, for example, and more patients have lost weight than gained while undergoing Norquen therapy.

Among 5,134 patients treated with Norquen for 57,590 cycles, the pregnancy rate was only 0.8 per 100 women-years—uncorrected for patient failure.

Norquen Tablets are packaged in strip packs. Strips are ideal for sequential therapy and virtually eliminate dosage confusion. Cartons of six single-cycle (20-tablet) dispensers are available to pharmacists at a suggested retail cost of \$8.25 per carton. Suggested retail cost of each three-cycle (60-tablet) dispenser is \$4.00.

Norquen brings to three the number of oral contraceptives available to the physician under the Syntex label. It joins two dosage forms of Norinyl (norethindrone/mestranol combination drugs) to give physicians greater selectivity in prescribing the oral contraceptive regimen best suited to individual patient needs.

MISSISSIPPI BLUE CROSS-BLUE SHIELD
PRESENTS

"SENIOR MED" SUPPLEMENT TO MEDICARE

DESIGNED
ESPECIALLY FOR PERSONS
AGE 65 OR OVER

Although the government's Medicare program provides valuable help for the elderly in time of illness or accident, there are several important expenses that Medicare does **not** cover. Blue Cross-Blue Shield's "SENIOR MED" fills the gaps in the Medicare program by covering these expenses—and adds benefits not provided by Medicare. For example:

1. Under Medicare . . . you must pay the first \$40 of a hospital bill during each period of sickness.

Blue Cross-Blue Shield's "SENIOR MED" pays the \$40 for you.

2. Under Medicare . . . payment will be made for semi-private room.

Blue Cross-Blue Shield provides additional room allowance up to \$4.00 per day toward private accommodations.

3. Under Medicare . . . you must pay \$10 each day from the 61st through the 90th day of your hospital stay.

Blue Cross-Blue Shield's "SENIOR MED" pays the \$10 a day for you.

4. Under Medicare . . . you must pay for health services outside the United States and its possessions.

Blue Cross-Blue Shield's "SENIOR MED" pays benefits anywhere in the world.

5. Under Medicare . . . you are limited to 90 days of hospital care for each "spell of illness."

Blue Cross-Blue Shield's "SENIOR MED" extends hospital services from 90 to 120 days.

Blue Cross-Blue Shield's "SENIOR MED" provides many other valuable benefits. Optional coverage up to \$5,000 for CANCER and 10 other catastrophic illnesses is also available.

JOIN BY MAIL

It's simple, it's easy to join by mail. No representative will call on you and no fee is required for joining.

FREE INFORMATION

Send for attractive information kit containing descriptive literature about benefits, along with complete directions on how to join.

**BLUE CROSS
BLUE SHIELD**

MISSISSIPPI HOSPITAL & MEDICAL SERVICE
530 EAST WOODROW WILSON AVENUE
JACKSON, MISSISSIPPI / TEL. 366-1422

MAIL COUPON FOR ALL THE FACTS

BLUE CROSS-BLUE SHIELD
P. O. Box 1043
Jackson, Mississippi 39205

Rush me complete information about your "SENIOR MED" Supplemental Program for persons age 65 and over.

☐ New Membership ☐ "Senior-Med" Cancer Protection
☐ Present Member—(My Contract Number Is _____)

NAME _____

STREET _____ STATE _____

CITY _____ AGE _____

TELEPHONE NO. _____

NEWSLETTER

MISSISSIPPI STATE MEDICAL ASSOCIATION

JACKSON, MISSISSIPPI

December 1967

Dear Doctor:

Organized labor's COPE, Committee on Political Education, has fallen on evil days amid strikes, internal strife, and scandal. The costly Ford strike scuttled UAW's plans for a separate political action fund, and the feud between Reuther and Meany cuts UAW gifts to COPE.

IUEW, International Union of Electrical Workers, has ousted its officers for alleged irregularities with funds. Out of 100,000 IUEW members, only \$1,400 was raised for COPE. Some unions are doing better, so remember MPAC and AMPAC.

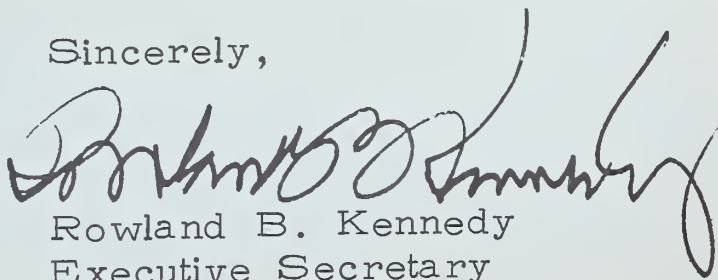
Elderly patients planning foreign travel should be advised that Medicare doesn't pay off outside the United States. The law makes the single, limited exception of caring for emergencies in Canadian and Mexican hospitals near the border. Also little known is that visitors to England receive free care under National Health Service by simply showing passport and visa.

That most intellectual of conservatives, William F. Buckley, had the last laugh on a union he was forced to join. Because of his TV program, Buckley was made to join the American Federation of Television and Radio Artists under a closed shop agreement. On his union benefit life insurance policy, he named as his beneficiary the National Right to Work Committee.

Accidents continue to be the major cause of death among school age children, and the trend is tragically mounting. New studies show that accidental deaths among U.S. children ages 5-14 increased from 6,100 in 1955 to 8,000 in 1966. Motor vehicle deaths account for most of increase. Forty-nine per cent of deaths are boys, and 33 per cent are girls, but 50 per cent more girls than boys are killed in autos - because mother takes them with her.

Devaluation of the British pound to exchange equivalent of \$2.40 from \$2.80 will hurt U.S. pharmaceutical manufacturing industry. Many of the bigger drug makers have plants in British Isles, and with price freeze, all local sales will suffer 14 per cent loss of revenue. Exports from English plants will also bring in correspondingly small amount of foreign exchange.

Sincerely,



Rowland B. Kennedy
Executive Secretary



21st Century Life Is Pictured As Grim

Los Angeles - Dr. John H. Knowles of Boston told a Harvard alumni meeting that in the 21st century, physicians will be caring for patients averaging 85 years of age and half will be hospitalized for organ transplants. He said hospital care will cost \$500 per day and that hospitals will be run by federal government and unions. Dr. Knowles said that sex will be outlawed in movies, books, and TV as an anti-population explosion measure. Another speaker said that air and water pollution will then be intolerable.

Empire State Capital Gets First Rat Control Grant

Albany - New York's own state rat control program went into effect last month with Albany County getting the first grant of \$70,000. State legislature appropriated \$1.5 million, and most of the money will go to research. New York is approaching problem in anti-fertility and sterility aspects of control, recognizing that rodenticides probably aren't the answer.

Mexican Altitude Olympic Debate Rages

Mexico City - Sports medicine experts are about evenly divided on the effect of Mexico City's 7,450 feet-above-sea-level on Olympic athletes at the upcoming summer games. Soviet physiologist Anatoly Korbokov says that all human organs can become acclimated easily and forecasts new records. But Nigeria's Dr. G. O. Sofolowe says that he can't convince a single athlete that he will be able to breathe in the high climate. Some reports say athletes trying out in Mexico City had respiratory ailments, diarrhea, weight loss, and dry mouths.

Lab Animal Law Is One Year Old

Washington - The Department of Agriculture, an unlikely agency for administering a medical program, reports completion of its first year under Public Law 89-544, the Lab Animal Act. Spokesmen say that 509 research facilities have been licensed and that these licensees operate a total of 1,400 separate sites where experimental animals are housed. Only 179 animal dealers have been licensed under law, demonstrating that most major medical research centers are breeding their own.

Pesticide Content In Food Remains Low

Washington - Charges in "The Silent Spring" and other anti-pesticide books notwithstanding, the Food and Drug Administration reports that pesticide residue in the nation's food supply has remained low for the third consecutive year. Samples of food are regularly taken in 30 U.S. cities, and all show residue levels much lower than acceptable daily intake maximums.

**For the
cardiac patient
on 2 pillows
a night,
consider one
Hygroton a day.**

**Hygroton®
chlorthalidone**

**new 50 mg. tablet
or 100 mg. tablet**

She was the picture of arteriosclerotic heart disease in failure.

She couldn't sleep a wink without an extra pillow.

Then her doctor prescribed digitalis and Hygroton.

First, her cardiac output improved. Then her breathing improved — along with her urinary output.

Nights could be a lot more pleasant for patients like this in your practice. Try it and see.

Hygroton therapy may also mean troublesome side effects for certain patients.

A summary of essential prescribing information is shown below.

vere ischemic heart disease and patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. **Adverse Reactions:** Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, hyperuricemia, headache, muscle cramps, orthostatic hypotension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urti-

caria, purpura, necrotizing angitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.

Availability: White, single-scored tablets of 100 mg. and aqua tablets

of 50 mg., in bottles of 100 and 1000. (B)R46-230-D

For full details, please see the complete prescribing information.



Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York 10502
HY-5405S

Insurance Medical Chiefs Name Officers

Dr. W. O. Purdy, vice president and medical director of the Equitable of Iowa, Des Moines, has been elected president of the Association of Life Insurance Medical Directors of America.

Dr. Purdy was elected at the 76th annual meeting of the international organization representing medical executives of more than 300 life insurance companies. He succeeds Dr. Albert L. Larson, vice president and chief medical director of The Travelers Insurance Companies, Hartford.

Dr. Purdy joined Equitable of Iowa in 1936 as assistant director and was named medical director in 1956. He is active in many other insurance and medical organizations, among them, the American Life Convention, the Life Insurance Medical Research Fund, and the Polk County and Iowa Medical Societies.

Members of the association also elected Dr. Francis A. L. Mathewson, Great-West Life of Winnipeg, president-elect, and Dr. Thomas Sexton, Massachusetts Mutual Life Insurance Com-

pany, Springfield, Mass., vice president. Re-elected to new terms were Dr. Arthur E. Brown, New England Life, secretary; Dr. Chester E. Cook, Southwestern Life, treasurer; and Dr. Samuel R. Moore, Life of North America, editor of transactions.

SKF Reduces Price of Thorazine

The price of Thorazine® (chlorpromazine) has been reduced in ranges from 5 to 15 per cent, according to an announcement by Smith Kline and French Laboratories of Philadelphia.

F. M. Rivinus, SKF president, said in the announcement that "since we have encouraged the cooperation of pharmacists by reimbursing them for their current inventories of Thorazine, it is likely that these reduced prices will be available to many patients at an early date."

The amount of the reductions are dependent upon the dosage form and strength of the drug, Rivinus said.

Announcing the Thirty-First Annual Meeting of THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

Conference Headquarters—Roosevelt Hotel, March 4, 5, 6, 7, 1968

GUEST SPEAKERS

Morris J. Nicholson, M.D., Boston, Mass.
Anesthesiology

J. P. Nesselrod, M.D., Santa Barbara, Calif.
Colon and Rectal Surgery

Robert W. Goltz, M.D., Denver, Colo.
Dermatology

Charles H. Brown, M.D., Cleveland, Ohio
Gastroenterology

George E. Burket, Jr., M.D., Kingman, Kan.
General Practice

J. George Moore, M.D., New York, N.Y.
Gynecology

William Dameshek, M.D., New York, N.Y.
Internal Medicine

Oglesby Paul, M.D., Chicago, Ill.
Internal Medicine

John A. Aita, M.D., Omaha, Neb.
Neurology

Robert B. Wilson, M.D., Rochester, Minn.
Obstetrics

Mack L. Clayton, M.D., Denver, Colo.
Orthopedic Surgery

William H. Saunders, M.D., Columbus, Ohio
Otorhinolaryngology

Jon V. Straumfjord, Jr., M.D., Birmingham, Ala.
Pathology

Sydney S. Gellis, M.D., Boston, Mass.
Pediatrics

E. H. Schultz, Jr., M.D., Chapel Hill, N.C.
Radiology

Richard T. Shackelford, M.D., Baltimore, Md.
Surgery

Kenneth W. Warren, M.D., Boston, Mass.
Surgery

Laurence F. Greene, M.D., Rochester, Minn.
Urology

Additional speaker to be announced.

Lectures, symposia, clinicopathologic conference, round-table luncheons, medical motion pictures, technical exhibits, and entertainment for visiting wives. (All-inclusive registration fee—\$30.00.)

This program is acceptable for thirty-two (32) elective hours by the American Academy of General Practice.

**For information concerning the Assembly meeting write Secretary,
The New Orleans Graduate Medical Assembly, Room 1538,
1430 Tulane Avenue, New Orleans, Louisiana 70112.**

Pre-Assembly Special Symposium—Sunday, March 3—"Sexual Problems in Clinical Practice."

New—Two Pediatric Forms of Erythromycin and Triple Sulfas



ERYTHROCIN®-SULFAS Chewable (Erythromycin ethyl succinate-trisulfapyrimidines chewable tablet)

In clinical trials^{1,2}, this orange-flavored tablet was given to 55 patients, aged four months to 18 years.

Diagnoses (multiple in some cases) represented a cross section of bacterial infections commonly seen in pediatric office practice.

Therapy was given from three to 12 days, with an average of six days.

Of the 55 patients, 30 were reported cured within 72 hours, while 22 showed partial recovery within the same time, and subsequent clinical cure.

A clinical cure rate of 94.5%

Case Reports on File, Dept. Clin. Development, Abbott Laboratories.
Polley, R.F.L., Use of Erythromycin-Sulfas in Office Practice, Western Med., 7:177, July, 1966.



ERYTHROCIN®-SULFAS Granules (Erythromycin ethyl succinate-trisulfapyrimidines granules for oral suspension)

87 patients were treated^{1,2}—all children, ages four months to 15 years.

The diagnoses were multiple in some cases and were chiefly bacterial infections of the respiratory tract.

Dosage was maintained from three to 10 days; average treatment was five days. All of the ill children accepted the orange-flavored suspension favorably.

53 were clinically cured within 72 hours, while 32 showed partial relief within the same time, and subsequent clinical cure.

701358

A clinical cure rate of 97.7%



Brief
Summary
on next
page

ERYTHROCIN®-SULFAS

Brief Summary

Contraindications: Known sensitivity to erythromycin or sulfonamides. Because of the possibility of kernicterus with sulfonamides, do not use in pregnancy at term, premature or newborn infants.

Warnings: As with other forms of sulfonamide therapy, carefully evaluate patients with liver or kidney damage, urinary obstruction, or blood dyscrasia. Deaths have been reported from hypersensitivity reactions and blood dyscrasias following use of sulfonamides. Perform blood counts and liver and kidney function tests if used repeatedly at close intervals or for long periods.

Precautions, Side Effects: Occasionally mild abdominal discomfort, nausea or vomiting may occur with erythromycin, generally controlled by reduction of dosage. Mild allergic reactions (such as urticaria and other skin rashes) may occur. Serious allergic reactions have been extremely infrequent. Use sulfonamides with caution in patients with a history of allergy. Assure adequate fluid intake to prevent crystalluria and institute alkali therapy if indicated. If overgrowth of nonsusceptible organisms occurs, withdraw the drug and institute appropriate treatment. If a patient should show signs of hypersensitivity, appropriate countermeasures (e.g. epinephrine, steroids, etc.) should be administered and the drug withdrawn.

Adverse Reactions: Sulfonamide therapy may be associated with headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Side effects due to erythromycin are infrequent, but occasional abdominal discomfort, nausea, or vomiting, urticaria and other skin rashes may occur.

Supplied: The Granules for Oral Suspension come in bottles of 60 ml. and 150 ml. The Chewable tablets are in bottles of 50. Each 5-ml. teaspoonful of reconstituted Granules or each Chewable tablet provides erythromycin ethyl succinate equivalent to 125 mg. of erythromycin activity and 167 mg. of each of sulfadiazine, sulfamerazine and sulfamethazine.

701358



Mid-South PG Sets February Meeting

Plans are being completed for the 79th Annual Meeting of the Mid-South Postgraduate Medical Assembly at Memphis, Feb. 14-16, 1968. Leslie H. Adams of Memphis, executive secretary of the assembly, said the Holiday Inn-Rivermont will be headquarters for the meet.

Following the pattern of previous years, the scientific program will feature noted authorities who will present essays on a wide range of topics. Technical and scientific exhibits will add to meeting interest, Adams said.

Medical school class reunions will be added features, and a record attendance is anticipated. Adams has urged all members to secure reservations early. The Mid-South membership area includes west Tennessee, north Arkansas, and north Mississippi.

PHS, AEC Study Radon Gas Hazards

The Public Health Service and the U. S. Atomic Energy Commission have agreed on a joint project to provide technical assistance to states and industry in evaluating public health implications of emissions of radon, a radioactive gas, from uranium mill tailings piles.

Work to be performed under the agreement includes (1) the development of techniques for sampling air for radon content in the vicinity of uranium tailings, (2) determination of the effect upon radon emissions when tailings are covered with earth or paving material, (3) evaluation of atmospheric concentrations near tailing piles as a first step to develop an index of population exposure, and (4) the preparation, if necessary, of recommendations for the control of radon exposure.

The Public Health Service's National Center for Radiological Health and National Center for Air Pollution Control and the Atomic Energy Commission's Division of Operational Safety are responsible for overall direction of the radon project. The Radiological Health Center's Southwestern Radiological Health Laboratory in Las Vegas, Nevada, and the Commission's Idaho Operations Office Health Service Laboratory in Idaho Falls will plan and make surveys and evaluate findings, working with the States involved.



ORIGINAL PAPERS

Infectious and Allergenic Conditions Of the Eye, Nose and Throat

SAM H. SANDERS, M.D.

Memphis, Tennessee

THE PLAN FOR THIS presentation is to give a short discussion of allergy in general, to tell of the breakthrough in the diagnosis and treatment of food allergy by means of the provocative food test, to mention or discuss some of the common eye, ear, nose, and throat conditions that can be aggravated or caused by allergy and/or infection.

It was vonPirquet (1903) who, on the basis of clinical observations and experiments on human beings, ingeniously promulgated the principles that have since become the basis of modern allergy. He coined (1906) the term "allergy" (Greek ἄλλη "εργεια", "altered capacity to react").¹

One may develop an abnormal reaction to a normal substance after one or more exposures to an allergen in this substance. The reaction, in the majority of cases, has the ability to return to normal. The tissue that is affected by the allergy is called the shock organ. This may be a system such as the respiratory tract or a part of this system such as the nasal mucosa in the upper respiratory tract or the reaction may be localized in a very small area of any portion of the body.

The various stages of life seem to have an influence on the shock organ. Infants with asthma, in whom the shock organ is the lungs, may develop an allergy of the skin in the form of atopic

dermatitis or vice versa. The skin may be the shock organ from the age of 6 months to 5 years or more. The skin may clear and nasal symptoms appear for a few years and still another shock organ appear at the age of puberty. The shock organ may change to the G.I. tract after the men-

More general conditions are produced or aggravated by allergy than is suspected by the average physician, writes the author. He discusses the breakthrough in the diagnosis and treatment of food allergy by means of the provocative food test, and discusses some of the common eye, ear, nose, and throat conditions that can be aggravated or caused by allergy and/or infection.

opause, producing vague complaints that cannot be explained by the physical, x-ray or laboratory findings. Some are diagnosed vaguely as non-functioning gallbladder, spastic colon, diarrhea "cause undetermined." J. Warrick Thomas has shown conclusively that ulcerative colitis can be caused by allergy.

Failure to appreciate the fact that various stages of life influence the shock organ in allergy has caused many physicians to think that children will outgrow their infantile eczema or atopic dermatitis, asthma, hay fever and many or even all other allergic conditions. This is the worst

From the Department of Otolaryngology, University of Tennessee College of Medicine.

Read before the Section on EENT, 99th Annual Session, Mississippi State Medical Association, Biloxi, May 15-18, 1967.

information that could be given a patient because the allergic individual tends to develop more allergies unless the initial allergy is controlled.

I doubt if anyone questions the validity of pollinosis or hay fever, but there are many who refuse to accept allergy as a cause or aggravator of the many symptoms it does produce—which may “mimic” any disease. These same physicians prescribe antihistamines more than the allergists. The introduction of antihistamines and their use had a great influence on the acceptance of allergy by the medical profession.

The failure of the otolaryngologist to recognize allergy as a clinical entity in the early days of our specialty got us in “deep water.” Those not recognizing the various types and degrees of allergy today are having their troubles also. The allergy band wagon is traveling very fast these days and, although there is enough room for everyone, many are missing it. For instance, in 1961 the provocative food test was introduced by Carleton H. Lee, M.D., of St. Joseph, Mo., and publicized by Herbert Rinkel, M.D., at Dr. Lee’s request.²

An extract of a specific food, of a determined strength, when injected into a patient allergic to that food, will produce the same symptoms as when the food is ingested. The symptoms are usually more marked, depending on the strength of extract used. Many times other symptoms are noticed that had not been recognized previously. These symptoms can be relieved within a period of two to seven minutes by the injection of a specific amount of a more dilute extract of the same substance. This comes as near fulfilling Koch’s postulate as anything. This method of testing for food sensitivity is not accepted by most general allergists, but it is by the otolaryngological allergists.

IMPRACTICAL TESTS

The scratch and intradermal tests for foods were found to be impracticable. Deliberate feeding tests were of value when properly carried out but were time consuming and required well-trained personnel for proper interpretation. Elimination diets are made more difficult because of the various types of food reactions with reference to time, masking, and cyclic quality.

Food allergy is nothing new. According to Adams, Hippocrates said, “It appears to me that they would search out the food befitting their nature—too many times this has been the commencement of a serious disease when they have merely taken twice in a day the same food they

have been in the custom of taking once.”³ This has been found to be a true statement.

Time will not permit a discussion of the changes in the degree of sensitivity in cyclic food allergy. Please refer to Rinkel’s text on Food Allergy⁴ for a detailed description of this and other subjects on food allergy. Suffice to say the provocative food tests have been of great assistance to us in making an accurate and complete allergy diagnosis.

Progress has also been made in mold and inhalant allergy. With Rinkel’s intradermal titrations, one can determine an accurate dosage that may give the patient immediate relief. All are not so accommodating.

PATHOLOGY MOST LIKELY

In presenting the following conditions as being caused or aggravated by allergy, no insinuation is intended that allergy alone is the only or most frequent cause. Local pathology in the eye, ear, nose, and throat should be the most likely cause of these symptoms in that particular structure. But if no local abnormality or pathology exists to account for the symptoms, allergy should be considered as a possibility. This gives an advantage to the otolaryngological allergist. Not only can he determine if an allergy exists, but also what part it plays in producing the patient’s symptoms.

In discussing the following conditions, we are assuming the local and other logical causes have been eliminated.

Fatigue is the most common symptom of food allergy. It most often occurs in the morning even though the patient has had a normal amount of rest. Sometimes there is less fatigue in the middle of the day. Fatigue is a mental and physical handicap. It affects one’s effort to overcome disease, all kinds of problems and to cope with everyday life. The food allergic patient is most grateful when his normal energy is restored.

The allergic salute, rubbing the end of the nose with the finger, hand and forearm, demonstrates a most common sign of allergy—itching. Many patients use various methods of alleviating this symptom, depending on where the symptom is and what is available for him to use to scratch. Some twitch their nose or face muscles, rub or bat their eye lids, scratch their soft palate with their tongue, or twitch their muscles so their clothes will rub certain areas. Watch some of your friends or television characters and their contortions. Probably their contortions are to relieve the itching or spasms of the muscle produced by an allergen. The existence of this with

symptoms of eye, ear, nose, and throat conditions that cannot be explained by existing pathology should be considered allergic until proven otherwise.

Since contact lens have become more popular, one sees patients who have difficulty in wearing the lens because of itching and excess lacrimation. History, clinical findings and skin tests indicate the patient has had subclinical allergies. The small amount of irritation of the eyes, caused by the contact lens, increased the symptoms to a point of aggravation and discomfort. Apparently these patients are not sensitive to the material in the contact lens.

The possibility of vernal conjunctivitis being caused or aggravated by the local action of the pollen on the conjunctiva of the eye is not an unreasonable assumption. Many of these patients do not have any systemic symptoms of allergy but the majority do. Only mild skin reactions are sometimes obtained but response to hyposensitization is good in most cases.

Headaches are common in the allergic patient. Those due to food often start in the early morning hours, four to six hours following the ingestion of the allergen. The location, severity, and duration of the headache varies.

PATTERN OF HEADACHES

Some headaches fall within a pattern as migraine, histaminic cephalgia, tension as well as others. A portion of these types of headaches may be of allergic origin, and this should be considered, especially, in all so-called atypical migraine.

Because of cyclic food allergy and not knowing the ingredients of various dishes and food products that go into the dishes, headaches caused by food may be difficult to prove. For instance, a patient attempting to eliminate milk from her diet used Coffee Mate in her coffee. Coffee Mate is labeled as a dairy-free product, but it contains Casine and is so labeled. The patient did not know Casine is the protein in milk to which she is allergic.

Corn is next to impossible to eliminate. Aspirin tablets contain cornstarch. Cornstarch is put on plastics to keep it from sticking together. A recently revised list of corn contained products number into the hundreds.

Often a person can tolerate a food once a week without having any symptoms. If this same food is ingested two or more days or meals in succession, symptoms will occur. This is the cyclic food phenomena. There are many variations. The fre-

quency of the intake may influence the severity of the symptoms.

These points are being brought out to show the difficulty in making a diagnosis of food allergy by the elimination of a food in all but a fixed food allergy.

ALLERGY-RELATED HEADACHES

Headaches due to allergy, especially food allergies, are much more frequent than sinus headaches. Contrary to the general belief, sinus headaches are rare except in acute infections. In allergy there may be an excess amount of mucus or postnasal discharge and partial nasal obstruction. Because of the similarity of symptoms, the patient usually calls the allergic headaches "sinus."

Acutely infected sinuses, at the period the mucosa is edematous or those with an obstructed ostium, may produce headache or pain over the involved sinuses. Acute ethmoiditis may cause pain or discomfort on motion of the eye. An acute frontal sinusitis produces a severe headache with pain over the involved frontal sinus and tenderness when pressure is applied to the floor. Chronic sinusitis seldom is responsible for the headaches so often accredited to it.

To determine the cause of headaches is often difficult. The physician must always keep in mind the possibility of the headache being caused by a space-occupying lesion. If a patient describes the headache as pressure within the skull, be suspicious of a space-occupying lesion. The many possible causes of headaches may have to be eliminated one by one. The physician should never give up on the diagnosis and he should be certain provocative food tests have been done. An early diagnosis, as to the cause of a headache, is most desirable.

A dry cough is often caused by an allergy to a food. The cough varies in intensity, time, and onset and unless caused by a fixed food allergy, may depend on the frequency of ingestion. Some people cough soon after eating the food, others four or more hours later. This may be a deep or hacking cough. The same phenomenon may produce a tickling and desire to clear the throat or to cough.

RADIOLOGIC DIAGNOSIS

A cough on reclining occurs frequently in children and especially infants with acute or subacute maxillary sinuses. An x-ray of the sinuses is practically always required to make the diagnosis.

One occasionally sees the patient who complains of a sore throat that has been present for months and months. No sinus infection, adenoids,

tonsils, anemia, endocrine, chemical, vitamin, or any other deficiency exists. There is no scarring of the soft palate. Nothing can be seen that could possibly cause the continuous soreness unless one is of the opinion that any positive cultures of pathogenic organisms in the nasopharynx will cause a chronic sore throat.

Pathogenic organisms can be obtained from the nasopharynx almost any time. They are normally found there. The presence of positive cultures for pathogenic organisms does not necessarily prove the existence of infection, but if there is predominance and persistence of one pathogen on repeated cultures, just consideration should be given to infection as a possible cause. Infection is not likely to cause a continuous sore throat but often produces recurrent sore throats.

There are many conditions that influence the lymphoid tissue on the pharyngeal wall. The appearance, size and amount varies greatly in individuals. There are changes in the nasal and pharyngeal mucosa in early pregnancy. Lymphoid buds are not necessarily pathological. It is sometimes difficult to evaluate their influence on a chronic sore throat. Their removal from the oropharynx often fails to accomplish much, if anything. The return of the adenoids or lymphoid tissue in the nasopharynx following adenoid removal in the allergic individual before his allergy is controlled occurs too frequently to be coincidental. The pathological changes of the lymphoid tissue in the nasopharynx and base of the tongue are often overlooked. A Tornwaldt's bursa may cause a chronic sore throat.

CLINICAL SIGNS

When sufficient infection is present to produce symptoms, a very slight elevation of temperature and possible change in the blood count should be present from time to time. Vaccines may be of benefit in cases of recurrent infections, more so if given in small doses. When the patient's resistance is low, larger doses of vaccines are likely to produce more local and systemic reactions than are desired. Small (0.03 to 0.06) and frequent (three days) doses over a longer period of time are effective in the patient who does not have any immunity to the organisms in the vaccine administered.

Much has been written on serous otitis and its relation to allergy. There are those who believe the majority of cases of serous otitis are of allergic origin. Others do not. What is the criteria for

diagnosing allergic serous otitis? Eosinophiles are seldom found in the serum removed from the middle ear. For this reason many otologists say that serous otitis is seldom due to an allergy. Other otologists say that eosinophiles do not have to be present for a diagnosis of allergic serous otitis and the only requirement is that the patient have an allergy with no other apparent cause.

With this criteria, serous otitis due to allergy is frequent. When one takes into consideration the increase in serous otitis since the advent of antibiotics, one must realize their administration with reference to the stage of the infection and amount of drug given has had some affect on this complication.

COMPERE'S FINDINGS

Eugene Compere, M.D., La Mesa, Calif., has shown the emptying mechanism of the middle ear is affected in these cases. One could surmise certain cases of serous otitis as a disease entity.

An allergenic food has been known to produce sufficient serum in the eustachian tube and middle ear to rupture the tympanic membrane a short while after ingestion. Food allergy causes eustachian salpingitis. Even though these are proven facts, the otolaryngologist should eliminate the more common causes or local pathology in the ear, nose and throat as the source of trouble before searching for an allergic factor. On the other hand, allergy should not be overlooked as a possible cause or aggravator of serous otitis.

It is a well-known fact that allergy can produce nasal polyps. Many otolaryngologists are of the opinion that the majority of polyps are due to allergy. In my opinion, infection causes more polyps than allergy. The polyps due to allergy generally accompany acute pollinosis and arise from the roof of the nose between the middle turbinate and the septum. During the acute pollinosis one cannot see into the area of the nostril because of the excess mucus, congestion of the nasal mucosa and its inability to respond to decongestants.

In the first stage, the so-called polyp is a cyst. If opened, the fluid will run out. The changes in the nasal mucosa are reversible if the pollen sensitivity is of short duration. If the patient is sensitive to pollen present in the air from February to October, the most marked changes in the nasal mucosa (that is, in the roof of the nose) may become irreversible leaving polyps in this area. These polyps will become infected sooner or later and the infection will spread to the ethmoid and other sinuses, eventually entering the lower respiratory tract.

The prevention of this calamity is to recognize and hyposensitize the patient to the offending allergen before the secondary infection occurs or other allergies develop because of neglect of the primary allergen. The treatment of choice is not satisfying the patient by partially relieving his symptoms with the corticosteroids, antihistamines, and antibiotics while the infection spreads and the nasal pathology becomes irreversible. Early diagnosis and adequate treatment is desired to prevent irreversible changes in the nasal and sinus mucosa thus preventing the necessity of surgical removal of this irreversible pathology in the nasal cavity, sinuses and that in the lungs. Experience has proven that chronic upper respiratory infections eventually involve the lower respiratory tract.

Polyps due to infection are mere prolapses of the sinus mucosa into the nasal cavity. If seen when they first occur, they would be protruding through the sinus ostium. Those arising from the ethmoid usually break through the floor of the ethmoid cells and nasal mucosa of the middle meatus about the same time. One does not have the privilege of seeing these polyps in the early stages often. Most patients are seen after the nose is full of polyps and no one can tell their origin or source.

Personality changes, fluid retention, blood count, pulse rate, volume, and pressure can be altered by allergic reactions to food as can any other part of our bodies. We can cause, relieve, and reproduce these conditions with specific aller-

gens. As these facts become more generally known, the sarcastic comments one sometimes hears regarding allergy and the allergic individual will be heard less often.

SUMMARY

All ear, nose, and throat conditions can be caused or aggravated by allergy. More general conditions are produced or aggravated by allergy than is suspected by the average physician. Only a few conditions have been mentioned to call attention to this most important subject.

Infection is often superimposed on allergy, making the diagnosis and treatment more difficult. The part allergy and infection play in producing the pathology must be determined and each given specific treatment.

Allergy is becoming more and more important in our area of medicine as well as other branches of medicine. It is essential we recognize this fact and attempt an early diagnosis and specific treatment. ★★★

1286 Peabody Ave. (38104)

REFERENCES

1. Urbach, E.: Allergy, New York, Grune and Stratton, 1943, p. 2.
2. Lee, Carleton H.: Provocative Food Test, St. Joseph, Buchanan County Medical Bulletin (February) 1961.
3. Adam, F.: The Genuine Works of Hippocrates, Baltimore, Williams and Wilkins Company, 1939.
4. Rinkel, Herbert J.: Food Allergy, Springfield, Charles C Thomas Company, 1950, p. 6.

LIVING COLOR, AT THAT

The young couple, both rabid football fans, had no luck finding a baby sitter the night of the big game, so they took their five year old daughter with them. Arriving at the stadium after the kickoff, they were astonished with the child's reaction as they emerged from the tunnel into the stands:

"Look, daddy," she cried. "It's in color."

Radiologic Seminar LXVIII:

Villous Tumors

ORREN W. HYMAN, JR., M.D.
Oxford, Mississippi

AN ENGLISH PATHOLOGIST, Holmes, published an article giving the terminology "villous tumor" in 1861. Since that time, the intestinal neoplasm has had numerous names from papillomatous polyp, villous papilloma, mucous polyp, papillary adenoma to superficial vegetant epithelioma and adenoma destruans. A general return to Holmes' original nomenclature has evolved during the last two decades.

Such abundance of terms as villous polyp, papillary fibroadenoma and the others is due in part to the fact that there is a variance in degree of a villous pattern in these tumors with those lesions having the greatest degree of villous pattern designated as villous papillomata. A tendency prevails to report benign lesions as villous adenomas and malignant lesions as papillary adenocarcinoma.

Villous tumors are uncommon with all investigators disclosing they constitute 1 to 3 per cent of all large bowel neoplasms and 14 per cent of all rectosigmoid tumors. There is no significant preponderance of occurrence in male or female patients. In general, the average age is around 60 years with the age range of patients being reported from 23 to 81 years.

Basically, the lesion arises and is confined to the mucosal layer until malignancy prevails. It is composed of villi made up of loose supporting vascular stroma covered with a single layer of columnar epithelial cells. As the neoplasm develops, the typical gross description is that of a broad-based lesion having irregularly and poorly demarcated polypoid masses consisting of vast numbers of small and larger projections piled on top of one another, all carpeted with villi.

As the projections gather together, deep clefts result giving an overall warty and cauliflower ap-

pearance. This in turn is covered by the copious, watery, tenacious mucous secretion from the villi. With the lesion submerged in water, the villi float upward like seaweed or tentacles of sea anemones. The villi are longer and better formed at the center of the lesion and become shorter toward the edge gradually fading into the normal mucosa.



Figure 1. Mottled appearance in low sigmoid with barium outlining large nodular tumor mass.

Sponsored by the Mississippi Radiological Society.

Three main types are encountered: 1. a flat carpet-like growth extensive in longitudinal and circumferential growth, 2. a central bulky mass, lobulated with each lobule separated by deep clefts with the carpet-like growth sometimes extending beyond the central mass (the most common type), and 3. a short, broad truncated lesion with the "cauliflower" growth extended up from the mucosa (10-30 per cent of lesions).

The classification is in four groups: I. benign, II. lesions with atypical cells, III. local carcinoma limited to the mucosa (carcinoma in situ), and IV. lesions with invasive carcinoma.

Villous tumors occur predominantly in the rectosigmoid region of the colon with 80 per cent being so located. The incidence becomes less upward toward the right colon. Rarely they have been found in the duodenum with two cases thus reported. Microscopic findings fundamentally are the same wherever the tumor is found in the intestinal tract.

There is a high incidence of malignancy in these tumors. Indeed, many investigators believe the benign lesions will all develop carcinoma if given time. Various percentages of malignant growth in different series are given. The range extends from 24 per cent to 50 per cent to 70 per cent incidence of carcinoma with the average being around 45 per cent.

When a villous tumor is found, a high incidence of concomitance of another growth in the colon exists and some authors note the occurrence in 27 to 34 per cent of patients.

SYMPTOMATOLOGY

In one series, 27 per cent of the patients were asymptomatic when a villous tumor was discovered on routine proctosigmoidoscopic examination. As expected, a small lesion may cause occasional diarrhea and as the lesion develops, the more typical history develops for the colonic tumor. Symptoms on the average initiate and increase in severity over a duration of 26 to 28 months. The length of history varies from two days to 15 years in one series. Welch and Dockerty report symptoms as bleeding in 71 per cent; colic in 50 per cent; mucous passage in 29 per cent; fatigue and weight loss in 18 per cent of patients.

The characteristic history for villous tumors is that of a copious, watery, nonirritating rectal discharge which may be evacuated as often as 20 times a day. This may be observed in nearly half the patients. As much as 1.5 to 3 liters of diarrhea stools can be lost daily and the patient can lose

up to 5 gm. of protein. Such patients show weakness, anorexia, abdominal pain, muscle cramps, nausea and vomiting, rapid weight loss and even syncopal episodes. In these extreme cases the patients can mistakenly be diagnosed as having acute

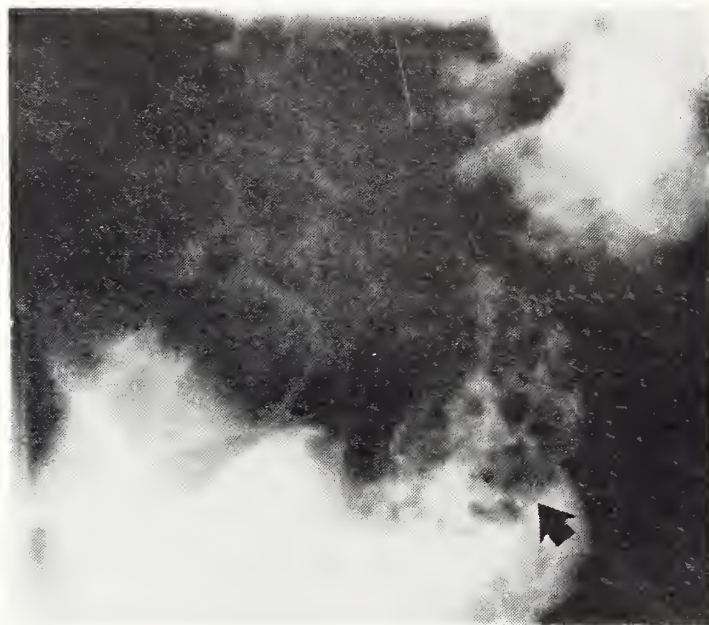


Figure 2. Spot film demonstrating rigid and sharply defined margin of lesion indicating strong probability of carcinomatous change. Mucosal detail reveals nodular structure of the tumor.

adrenal insufficiency or diabetes. Occasionally, the patients may present as acute emergency cases with hypotension, dehydration and with mental aberrations ranging from confusion and drowsiness to coma.

The diarrhea causing these severe findings results from the villous tumor having a great secreting surface. The fluid originates from the tumor actively secreting (not a transudate or exudate) sodium and chloride in the material with concentrations the same as in serum. Potassium concentration is actually several times higher than in serum and because of this the tumors have been referred to as "potassium secreting tumors of the rectum."

If the lesion is located higher in the right colon (or even duodenum), symptoms of muco-diarrhea and the resultant electrolyte imbalance to the patient are not encountered. This is explained by the tumor's secretions being absorbed by the proximal bowel. Occult blood is still found in the stools, however.

With rectal lesions, patients might have a feeling of incomplete evacuation after a bowel movement. Sometimes a prolapse of the tumor occurs and even fragments of the growth (free biopsies) can be passed.

Most villous tumors are readily palpated (74

per cent) and even more found when a proctosigmoidoscopic examination is done (83 per cent). On palpation the lesion typically has a velvety feeling, when the scope is used, its friability is evident as bleeding is easily produced. Smaller lesions can be easily missed. During the sigmoidoscopic examination, the lesion ordinarily does not hamper maneuverability of the scope. However, any induration, fixation or ulceration indicates malignancy.

RADIOLOGIC DIAGNOSIS

Diagnosis of villous tumor is most often made previous to the barium enema on the proctosigmoidoscopic examination due to this being the most common location of the growth. The radiologist knowing the gross characteristics of the lesion and the three main types can suspect the diagnosis.

At time of fluoroscopy, the intraluminal, multiple polypoid lesion not causing complete obstruction might be covered with a lacework pattern of barium. The lesion can appear variable in shape because of the villi and numerous clefts and mucous holding barium differently from time to time. A "cauliflower polyp" can be typical for some villous tumors.

A constant rigid defect or persistent constriction of the lumen is indicative of carcinoma. With good definition on roentgenograms, one might seek an ulceration denoting malignancy. In general, malignancy can never be ruled out nor can the true extent of the lesion be determined on roentgenograms.

Villous tumors filling the rectum can be erroneously called fecal impactions and sometimes the tumors simulate ulcerative colitis or a congenital polyposis. The pedunculated villous tumor has a broader trunk than the stalk of an adenomatous polyp.

Hypochromic anemia of varying severity may be found secondary to chronic blood loss. Patients having diarrhea initially may have a normal acid base balance or a metabolic alkalosis and as severe fluid loss continues, an acidosis supervenes. Ordinarily an electrolyte disturbance from diarrheal loss of 1000 cc/day can be compensated by the kidneys. Yet with severe diarrhea, hypovolemia results, giving hyponatremia made worse by copious intake of water by the patient.

Hypovolemia causes azotemia since the renal glomeruli are not able to excrete the excess nitrogen. Hypokalemia is due primarily to the villous tumor secreting sodium, potassium, and chloride.

Actually, because of the hypovolemia, low blood protein and calcium may not be evident. In patients with an electrolyte imbalance, the treatment commences from the laboratory. The problems of fluid loss and electrolyte imbalance must be carefully evaluated and corrected prior to surgery.

Practically all investigators advocate a vigorous and, where indicated, a radical surgical extirpation of the lesion such as by an anterior-posterior resection. In case of segmental resections there should be wide resection well beyond the gross lesion since recurrences are frequent. No spillage of bowel contents should be allowed since even benign villous tumors can implant and thus present as a growth later on at the operative site or incision. Various surgical techniques for pull through operations at the perineum for low lying lesions are done.

If the tumor is small (less than 4 cm.), it may be removed at the time of sigmoidoscopy by fulguration but followed by resection if malignancy subsequently is revealed.

Radium applications and external radiation therapy have no real place in the treatment of villous tumors.

CASE REPORT

A 70-year-old female entered the hospital with dehydration, disorientation, severe weakness and weight loss. She had a history of progressive bloody mucoid diarrhea for six months. Abdominal ascites and edema of lower extremities were noted.

Laboratory workup revealed anemia, hypoproteinemia, and low hematocrit. A barium enema illustrated an extensive lesion of the sigmoid colon suggesting a villous tumor with malignancy not ruled out. After appropriate fluids, electrolyte and plasma replenishment, a segmental resection of the sigmoid colon was done.

The pathological report was papillary adenocarcinoma with invasion through bowel wall but no lymph nodes involvement elicited. ★★★

Oxford-Lafayette County Hospital (38655)

I wish to thank Dr. M. Beckett Howorth, Jr., surgeon, for the use of information on his patient and Dr. Lawson C. Costley, pathologist, for his consideration.

REFERENCES

1. Babior, B. M.: Villous Adenoma of the Colon, *Am. J. Med.* 41:615-621, 1966.
2. Diffenbaugh, W. G.; Strohl, E. L.; Anderson, R. E., and Woodward, N.: Papillary (Villous) Adenomas, *A.M.A. Arch. Surg.* 88:577-585, 1964.
3. Ferraro, L. R., and Ross, S. T.: Evaluation of Villous Patterns in Tumors of the Colon and Rectum, *Dis. Colon and Rectum* 8:144-148, 1965.

4. Frye, T. R.: Villous Adenoma of the Sigmoid Colon, *Radiology* 73:71-75, 1959.
5. Goldfarb, W. B.: Villous Adenomas of the Right Colon, *Cancer* 17:264-271, 1964.
6. Hines, M. O.; Hanley, P. H.; Ray, J. E., and Brallier, M.: Villous Tumors of the Colon and Rectum, *Dis. Colon and Rectum* 1:128-131, 1958.
7. Hines, M. O.; Hanley, P. H., and Schramel, R.: Villous Tumors of the Colon and Rectum, *South. M. J.*, 48:891-897, 1955.
8. Holmes, T.: Villous Tumors of the Rectum, *Tr. Path. Soc. London* 12:120, 1861.
9. Malmed, L. A., and Levin, B.: Villous Adenoma of the Duodenum, *Am. J. Roentgenol.* 94:362-365, 1965.
10. McMurrey, J. D., and Hill, W. T.: A New Look at Villous Adenomas, *Texas J. Med.* 61:817-822, 1965.
11. Moersh, R. N.; Woolner, L. B., and Clagett, O. T.: Villous Adenoma of Duodenum, *Surgery* 51:574-577, 1962.
12. Ramirez, R. F.; Culp, C. E.; Jackman, R. J., and Dockerty, M. D.: Villous Tumors of the Lower Part of the Large Bowel, *JAMA* 194:121-125, 1965.
13. Silverman, J. L.: Operative Implantation of Villous Adenomas into the Soft Tissue, *Cancer* 17:1456-1462, 1964.
14. Welch, J. S., and Dockerty, M. B.: Villous Carcinoma of the Colon, *Dis. Colon and Rectum* 1:251-261, 1958.
15. Wheat, M. W., Jr., and Ackerman, L. V.: Villous Adenoma of the Large Intestine, *Ann. Surg.* 147:476-487, 1958.
16. Wolf, B. S.: Roentgen Diagnosis of Villous Tumors of the Colon, *Am. J. Roentgenol.* 84:1093-1104, 1960.

ERRATUM

The JOURNAL regrets the serious error in the text of the excellent paper, "Carcinoma of the Cervix in Pregnant Patients," by Dr. Warren C. Plauche of Biloxi, in the last issue (*J. Miss. St. Med. Assn.* VIII:647-651 (Nov.) 1967). The last sentence of the first paragraph on page 650 should read: "We therefore feel that after 12-13 weeks' gestation, when the cervix would have to dilate considerably to allow passage of the conceptus, the uterus should be emptied by hysterotomy."

Quite inadvertently and obviously incorrectly, the article carried the error "... emptied by hysterectomy." The Editors apologize to Dr. Plauche and to our readers.

Leukocyte Alkaline Phosphatase

LEONARD C. HIGGINS, JR., M.D.

Jackson, Mississippi

ALKALINE PHOSPHATASE is only one of many substances to be found within the white cell. Early investigations of the metabolic mechanisms of leukocytes revealed that they consumed oxygen, split sugar, produced lactic acid from glucose and contained numerous chemical substances including ascorbic acid, histamine, glycogen, and glutathione.¹ Enzyme studies suggested the presence of amylase, lipase, lysozyme and, among others, phosphatase.

Four years after Kay suggested that leukocytes contain phosphatase, Roche, in 1931, successfully demonstrated the presence of alkaline phosphatase in preparations containing granulocytes and lymphocytes from the rabbit, guinea pig, and horse. Subsequently it was discovered that compounds such as bile salts, saponin, and alkyl sulfate detergents liberated active phosphatase from leukocytes in suspension.

By using disodium phenyl phosphate as the substrate, it was shown that, in the human leukocyte, alkaline phosphatase (L.A.P.) was present chiefly in the mature neutrophils and band forms in the peripheral blood.¹ Eosinophils, basophils, and monocytes are always phosphatase negative.² In bone marrow preparations alkaline phosphatase is present not only in the mature neutrophil and bands, but also in the metamyelocyte and the reticuloendothelial cell.^{2, 3} Acid phosphatase is found chiefly in the lymphocyte.¹ Zinc, copper, magnesium, and manganese ions are known to be present in the granulocyte, and it has been shown that zinc activates leukocyte alkaline phosphatase and may actually be part of its molecular structure.^{4, 5}

Leukocyte alkaline phosphatase is in no way related to the serum alkaline phosphatase.^{3, 6} Neither is there any correlation between leukocyte

alkaline phosphatase and the total white cell count or the concentration of total serum protein. There is, however, a significant correlation between leukocyte alkaline phosphatase and the Alpha-1 and Alpha-2 globulins. Protein fractions of leukocyte extracts showing alkaline phosphatase activity have the same electrophoretic mobility as that of the serum alpha globulins.⁷ The first careful clinical study of leukocyte alkaline phosphatase was published by Wachstein in 1946.⁸

Although no specific metabolic function has yet been ascribed to leukocyte alkaline phosphatase, knowledge of its presence has been utilized in clinical diagnosis and treatment. The author discusses the two methods generally employed to determine the concentration of this enzyme and discusses its place in diagnosis and management of certain disease entities.

Currently two methods are generally employed to determine the concentration of this enzyme. They are: (1) a histochemical or cytochemical staining technique and (2) a biochemical isolation technique. The biochemical studies involve separation of white cells from whole blood and subsequent measurement of enzyme activity. Venous blood mixed with dextran and sodium citrate is stored at 4°C and allowed to settle. The supernatant plasma is removed, and the cellular remains are washed and resuspended in normal saline. An aliquot of this white cell suspension is added to buffered disodium monophenyl phosphate and the phosphatase activity is measured by the King Armstrong method.⁹ This is a tedious process which requires at least one hour in skilled hands.

From the Hematology Section, Department of Medicine, Veterans Administration Hospital.

Normal values by such a method range from 0-160 mg. of phosphorus per 10^{10} neutrophils. When this technique is compared to the direct neutrophil staining technique, discrepancies are found. Values obtained by the biochemical method are higher and this fact suggests that enzymes are present which do not influence the results obtained by the staining method. It is also possible that a single enzyme may react differently under various circumstances. Ethanol, formalin, potassium cyanide and zinc and magnesium cations are known to affect activation of alkaline phosphatase differently.⁹ This procedure, therefore, is not readily applicable in the usual clinical laboratory.

KAPLOW STAINING METHOD

The staining method described by Kaplow in 1955 is generally recommended for clinical use. The technique is as follows:^{3, 6}

(1) Prepare a dry unstained blood smear in the usual manner. Air drying at room temperature is essential in order to prevent improper staining and falsely elevated values.¹⁰

(2) Immerse the slide or coverslip in the fixative solution containing 10 per cent formalin in methanol for 30 seconds at 0°C (+ or -5°).

(3) Wash in running water for 10 seconds.

(4) Incubate in a freshly filtered substrate mixture of Fast Blue RR, sodium alpha naphthyl acid phosphate and propanediol buffer for 10 minutes at room temperature.

(5) Wash in running water for 10 seconds.

(6) Counter-stain with Mayer's hematoxylin for 3-4 minutes.

(7) Wash in running water for 10 seconds and air dry. The preparation is then ready for study.

This reasonably simple procedure permits easily reproducible results. The neutrophils can be identified and studied with ease and the final results are not influenced falsely by other blood cells.⁶ Alkaline phosphatase activity disappears rapidly in unstained smears at room temperature and therefore must be prepared on the day of collection.¹¹

The enzyme is located within the cytoplasm and is most likely within the cytoplasmic granules.¹² During the staining procedure the enzyme splits the phosphate from the sodium alpha naphthyl phosphate and the liberated naphthol combines with the diazotized amine, Fast Blue RR, to form an insoluble colored granular precipitate.^{12, 13} The depth of the color of the precipitate, which ranges from pale brown to black is the basis for deriving a score.

The criteria are: 0—no staining; 1+—diffuse

pale brown; 2+—diffuse medium brown with an occasional granule; 3+—brownish black with numerous granules; and 4+—uniform black. (Figure 1) The score is the sum of the ratings of one hundred cells.⁶ By this method the score ranges from 0-400. The normal adult score is 60 (+ or -20),¹² but each laboratory must establish its own

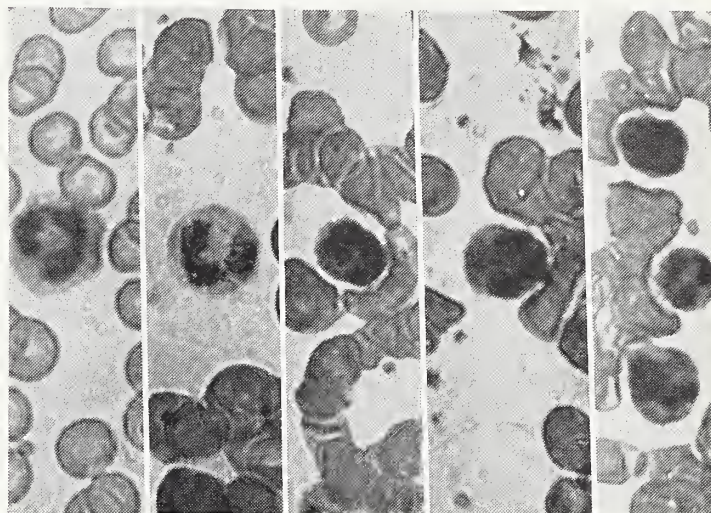


Figure 1. Leukocyte Alkaline Phosphatase Scoring read from left to right: 0, 1+, 2+, 3+, 4+ (top cell).

range. Values for any individual are essentially constant over a long period of time.⁹ It is unusual to find cells with 4+ activity in a normal or in a subnormal score.¹⁴ It must be remembered, however, that enzyme determinations are always affected by temperature, pH, and by glassware contaminants. For these reasons, a control slide should always be prepared.

These preparations are usually read within a few hours after preparation. Enzyme activity of one-month-old preparations will be reduced as much as 30-40 per cent.² There are available, however, established variations in technique which will allow satisfactory storage for several months. In one such procedure smears are air dried at 22°C or room temperature and fixed in cold fixative and an ice water rinse. Then they are wrapped in parafilm and frozen. Fixing the smears before wrapping prevents hemolysis and leaves the enzyme unaltered for more than two months thus allowing study at one's convenience.¹¹

VARIETY OF TECHNIQUES

In various techniques, stains other than Fast Blue RR have been used. Fast Red Violet and Brentamine Garnett give higher scores than does Fast Blue RR, probably because of a faster coupling rate. Needless to say the color of the finished preparation depends on the stains used. When attempting to preserve these preparations, glycerol

ALKALINE PHOSPHATASE / Higgins

gelatin or some other water soluble mounting must be used because azo dyes are soluble in oil.¹¹

Although no specific metabolic function has yet been ascribed to leukocyte alkaline phosphatase, knowledge of its presence has been utilized in clinical diagnosis and treatment. It has been shown that the concentration of leukocyte alkaline phosphatase rises very early in pregnancy and remains elevated throughout the pregnancy. This rise may be detected as early as the first missed menstrual period in some and almost all will show a rise at the seventh week of gestation.^{10, 15} On the basis of this rise, early pregnancy can be detected with an accuracy of 92 per cent. Subjects with equivocal results can be reclassified with accuracy five to ten days after initial testing. The leukocyte alkaline phosphatase activity increases as pregnancy progresses and during labor reaches very high levels.¹⁶ The newborn infant, not unexpectedly, demonstrates increased phosphatase activity.^{11, 16} Mean values for the newborn are higher and the range broader.¹¹

TABLE I
LAP NORMAL*

Artificial Hyperthermia
Secondary Polycythemias
Quiescent Hodgkins Disease
Systemic Lupus Erythematosus
Rheumatic Fever—uncomplicated
Rheumatoid Arthritis—active
Sickle Cell Disease—not in crisis

* 6, 17, 19, 20.

In the adult there is no relationship between enzyme activity, the total white cell count, the appearance of young forms or fever per se but there does appear to be correlation between adrenal cortical activity and the concentration of leukocyte alkaline phosphatase.^{6, 17, 18} The phosphatase value rises following stress and any general increase in metabolic activity and indeed rises following the administration of ACTH or 17-hydroxycorticosteroids.^{6, 18} The rise following surgical stress lags behind the leukocyte rise by 24-48 hours. Peak white cell values occur 48-72 hours after surgery and return to normal by the time that the enzyme activity is greatest.¹⁹

Many disease entities are known to be accompanied by definite alterations in leukocyte alkaline phosphate activity; while in others normal enzyme activity is the rule. Normal values (Table I) are found in secondary polycythemias, quiescent Hodgkins disease, systemic lupus erythematosus,

uncomplicated rheumatic fever, active rheumatoid arthritis and sickle cell disease when not in crisis.^{6, 19, 20} The demonstration of altered enzyme activity may be of diagnostic value when attempting to differentiate between leukemoid reactions,

TABLE II
LAP INCREASED*

Pregnancy
Leukemoid Reactions
Acute Infectious Leukocytoses
Polycythemia Vera
Myelofibrosis and Myeloid Metaplasia
ACTH & Corticosteroids
Total Body Irradiation
Myeloma, Myocardial Infarction, Mongolism
Diabetic Acidosis, Q Fever, Sandfly Fever

* 2, 6, 9, 10, 14, 17, 18, 21, 22.

acute infectious leukocytoses, polycythemia vera and chronic myelocytic leukemia, especially when the history and physical examinations are not helpful. Classically, leukocyte alkaline phosphatase is markedly elevated in leukemoid reactions, acute infections and in polycythemia vera and markedly decreased in chronic myelocytic leukemia. Other clinical entities associated with increased or decreased values are tabulated in Table II and Table III respectively.

Obviously, when the total number of bands and neutrophils is decreased or the peripheral blood consists primarily of blasts, young forms, monocytes, or lymphocytes, the test is of little value and unnecessarily time consuming. Therefore, a low value is not helpful in the differentia-

TABLE III
LAP DECREASED*

Chronic Myelocytic Leukemia (except Busulfan remissions)
Acute Blastic Leukemia
Infectious Mononucleosis
Chronic Lymphocytic Leukemia
Idiopathic Thrombocytopenic Purpura
Paroxysmal Nocturnal Hemoglobinuria
Pernicious Anemia in Relapse
Aplastic or Refractory Anemia

* 2, 6, 9, 14, 17, 18, 21.

tion of many hematologic diseases but a definite increase in enzyme activity is a strong vote against a diagnosis of chronic myelocytic leukemia. In this instant the test finds its greatest value. ★★★

1500 E. Woodrow Wilson (39216)

REFERENCES

1. Valentine, W. N., and Beck, W. S.: Biochemical Studies on Leucocytes. I. Phosphatase Activity in Health, Leucocytosis and Monocytic Leucemia, *J. Lab. & Clin. Med.* 38:39-55, 1951.
2. Ranlov, Poul: Leukocytic Alkaline Phosphatases in Haematology, *Danish Medical Bulletin* 9:171-178, 1962.
3. Kaplow, L. S.: A Histochemical Procedure for Localizing and Evaluating Leukocyte Alkaline Phosphatase Activity in Smears of Blood and Marrow, *Blood* 10:1023, 1955.
4. McNary, W. F.: The Histochemical Demonstration of Trace Metals in Leukocytes, *J. Histochem.* 8:124-130, 1960.
5. Trubowitz, S.; Feldman, D.; Morgenstern, S. W., and Hunt, V. M.: The Isolation, Purification and some Properties of the Alkaline Phosphatase of Human Leucocytes, *Biochem. J.* 80:369-374, 1961.
6. Kemp, J. A.; Herndon, J. W., and Wright, C.: Vacillations in Leukocytic Alkaline Phosphatase, *South. M. J.* 55:281-286, 1962.
7. Berg, G.; Roorand, Ü.; Witte, S.; Götz, H., and Bressel, D.: Über die Beziehungen Zwischen Neutrophilen Leukozyten und Serum Globulinfraktionen, *Clin. Chem. Acta* 12:282-291, 1965.
8. Wachstein, M.: Alkaline Phosphatase Activity in Normal and Abnormal Human Blood and Bone Marrow Cells, *J. Lab. & Clin. Med.* 31:1-17, 1946.
9. Meislin, A. G.; Lee, S. L.; and Wasserman, L. R.: Leukocyte Alkaline Phosphatase Activity in Hematopoietic Disorders, A Correlative Study by Biochemical and Cytochemical Techniques, *Cancer* 12:760-766, 1959.
10. Harer, W. B., and Quigley, H. J.: Alkaline Phosphatase Activity in Granular Leukocytes as a Test for Early Pregnancy, *Obst. & Gynec.* 17:238-242, 1961.
11. Whitt, J.: Evaluation of a Histochemical Method for Determining Leukocyte Alkaline Phosphatase Activity and a Discussion of Normal Values in Adults and Newborns, *Am. J. Technology* 29:169-174, 1963.
12. O'Kell, R. T., and Axon, L. L.: Leukocyte Alkaline Phosphatase in the Newborn Infant, *Am. J. Obst. & Gynec.* 93:1181-1182, 1965.
13. Blum, L. L.: Cytochemical Alkaline Phosphatase Test of Mature Neutrophils in the Differential Diagnosis of Myeloproliferative Disorders. *J. Indiana M. A.* 55:1783-1784, 1962.
14. Perillie, P. E., and Finch, S. C.: Alkaline Phosphatase Activity of Exudative Leukocytes in Acute Leukemia, *Blood* 18:572-580, 1961.
15. Climie, A. R. W.; Heinrichs, W. L., and Foster, I. J.: Neutrophile Alkaline Phosphatase Test: A Review with Special Emphasis on Findings in Pregnancy, *Am. J. Clin. Path.* 38:95-103, 1962.
16. O'Kell, R. T., and Axon, L. L.: Leukocyte Alkaline Phosphatase in the Newborn Infant, *Am. J. Obst. & Gynec.* 93:1181-1182, 1965.
17. Beisel, W. R.: Neutrophile Alkaline Phosphatase Changes in Tularemia, Sandfly Fever, Q Fever and Non-Infectious Fevers, *Blood* 24:257-268, 1967.
18. Tanaka, K. R.; Valentine, W. N., and Fredricks, R. E.: Diseases or Clinical Conditions Associated with Low Leukocyte Alkaline Phosphatase, *New England J. Med.* 262:912-918, 1960.
19. Valentine, W. N.; Follette, J. H.; Hardin, E. B.; Beck, W. S., and Lawrence, J. S.: Studies on Leukocyte Alkaline Phosphatase Activity: Relation to "Stress" and Pituitary-Adrenal Activity, *J. Lab. & Clin. Med.* 44:219-228, 1954.
20. Mitus, W. J., and Dameshek, W.: Alkaline Phosphatase of Mature Neutrophils in Various Polycythemia, *New England J. Med.* 260:1131-1133, 1959.
21. Trubowitz, S.; Kirman, D., and Masek, B.: The Leukocyte Alkaline Phosphatase in Mongolism, *Lancet* 2:486-487, 1962.
22. Robinson, E.; Zakaria, E. M., and Rachmilewitz, B.: The Effect of Total Body and Partial Body Irradiation on Granulocytic Alkaline Phosphatase in the Rat, *Radiation Research* 26:527-533, 1965.

ONE ALONE

A puny, 130-pound man walked into a logging camp and asked for a job as a lumberjack. The big foreman laughed and said:

"Are you kidding? You're too puny."

"Give me a chance," the little fellow replied.

"Okay," said the foreman. "Let's see you cut down that tree over there; it's five feet thick."

The little guy opened a leather case and took out a magnificent, chrome-plated, double-edged axe and proceeded to cut the tree down in 10 minutes.

"That's unbelievable," exclaimed the foreman. "It takes my regular men all day to do that. Where did you learn to cut so fast?"

"In the Sahara," replied the little man.

"The Sahara?" asked the boss. "But that's a desert."

"It is now," said the little guy.

Experiences in a Coronary Care Unit In a Small Community Hospital

WILLIAM H. ROSENBLATT, M.D.
Jackson, Mississippi

THE CORONARY CARE UNIT at St. Dominic's Jackson Memorial Hospital in Jackson, Miss., was established in 1965 as a part of a cooperative study which included four other groups, the Presbyterian Hospital—University of Pennsylvania Medical Center, Abbingdon Memorial Hospital, Medical College of South Carolina, and St. Raphaels, New Haven, Conn. The cooperative study was prompted by Meltzer's study¹ of more than 700 male patients with acute myocardial infarction in four hospitals associated with the University of Pennsylvania which found that nearly one-half of deaths from acute myocardial infarction were due to arrhythmias.

On the basis of this unexpectedly high incidence of arrhythmic deaths, it was believed that the mortality rate from acute myocardial infarction could be reduced by continuous monitoring combined with an efficient coronary care unit, excluding the 30 per cent mortality rate of acute myocardial infarction patients who die before they reach the hospital. The average mortality rate from acute myocardial infarction in hospitalized patients is about 30 per cent, ranging from 22 to 43 per cent.

About 18 per cent of all patients with acute myocardial infarction die within 72 hours after admission. This percentage is rather constant in most hospitals and can serve as a base line for evaluating the effectiveness of a given program. Projecting this, one would anticipate out of 100 admissions with acute myocardial infarction, 30 deaths. Fourteen of these deaths would be due to arrhythmias, 13 from circulatory failure and 3 from other causes.

From Meltzer's original work² it was found that 70 per cent of all deaths from acute myo-

cardial infarction occurred within the first five days after admission. The practicality of continuous monitoring would have been limited if the death rate was distributed evenly and not concentrated in the first few days. These facts were known; first, 70 per cent of all deaths occurred within the first few days after admission; second, 47 per cent of the fatalities were due to arrhythmias, and lastly, arrhythmic deaths were preventable.

With this background, the group initiated a cooperative study, assigning the primary role to

In 1965 the Coronary Care Unit at St. Dominic's Jackson Memorial Hospital was established as a part of a cooperative study. Results of a study of 74 patients with acute myocardial infarction admitted to the unit are presented and discussed.

nurses especially trained in this field since it is quite clear that physicians cannot remain constantly with patients nor can they reach the bedside from elsewhere in the hospital to prevent an arrhythmic death. The nurse is the key to the system and is responsible, not only for the monitoring, but more significantly, the nurse initiates the treatment program of defibrillation. In addition, our project included a randomized system of administering anti-arrhythmic agents to evaluate the possibility of preventing arrhythmic deaths. The results of this aspect of the study will be reported elsewhere.

From May 1, 1965, through Dec. 31, 1966, a total of 106 patients were admitted to the coronary care unit of St. Dominic's Jackson Memorial Hospital because of suspected acute myocardial infarction. Out of these 106 patients, 74 exhibited

Read before the Section on Medicine, 99th Annual Session, Mississippi State Medical Association, Biloxi, May 15-19, 1967.

definite evidence of acute myocardial infarction. This represents roughly 70 per cent of the patients admitted to the unit. (See Figure 1)

The patients with proven acute myocardial infarction were kept in the coronary care unit for 96 hours, generally, or longer if deemed necessary. Arrhythmias developed in 71 of these 74 patients or 95.9 per cent. Such a high incidence of arrhythmias in acute myocardial infarction has also been found by others.^{3, 4, 5}

These were "good risk patients" on admission since, according to our protocol, we excluded those patients who at the time of admission presented evidence of serious arrhythmias, conduction defects, shock or congestive heart failure. This emphasizes how difficult it is to classify a patient

CORONARY CARE UNIT MAY 1, 1965 THRU DEC. 31, 1966	
ADMITTED (MYOCARDIAL INFARCTION SUSPECT)-----	NO. 106
PROVEN ACUTE MYOCARDIAL INFARCTION-----	74
INCORRECT DIAGNOSIS-----	32
% ACCURACY OF DIAGNOSIS-----	70

Figure 1

early as to whether he is a "good risk" or a "poor risk."

It is equally difficult to assess arrhythmias as minor, i.e., frequent atrial premature beats or frequent ventricular premature beats, versus major, i.e. supraventricular tachycardia, or ventricular tachycardia. Accordingly, all of the arrhythmias encountered are being presented without separation into "major" or "minor" ones. (See Figure 2)

These arrhythmias were, for the most part, effectively treated with drugs or otherwise, provided they were primarily in origin, that is, cardiogenic and not secondarily related to shock. Those arrhythmias secondary to cardiogenic shock generally did not respond to conventional drug treat-

ARRHYTHMIAS ENCOUNTERED IN PATIENTS WITH MYOCARDIAL INFARCTION IN CCU	
PERIODIC SINUS ARREST-----	NO. 1
NODAL TACHYCARDIA-----	9
NODAL RHYTHM-----	6
ATRIAL TACHYCARDIA-----	6
ATRIAL FIBRILLATION-----	4
VENTRICULAR TACHYCARDIA-----	9
VENTRICULAR FIBRILLATION-----	7
VENTRICULAR STANDSTILL-----	3
IDIOVENTRICULAR RHYTHM-----	6
PVC's-6/MINUTE-----	16
PAC's-6/MINUTE-----	4
TOTAL-----	71

Figure 2

ment or D.C. countershock. Only three of the seven patients who developed ventricular fibrillation satisfactorily responded to D.C. countershock. All of the instances of primary ventricular tachycardia responded to appropriate treatment.

COMPLICATIONS OTHER THAN ARRHYTHMIAS DURING STAY IN CCU		
	NO.	%
CARDIOGENIC SHOCK-----	16	21.6
CONGESTIVE HEART FAILURE-----	12	16.2
PULMONARY EMBOLI-----	3	4.0
RUPTURED VENTRICLE-----	0	0

Figure 3

Complications other than arrhythmias during the initial 96-hour period included cardiogenic shock, congestive heart failure and pulmonary embolization. (See Figure 3)

There were seven deaths in the 74 acute myocardial infarction patients treated in the coronary care unit during this period of study, or a mortality rate of 9.4 per cent. The causes of death in these seven patients were ventricular fibrillation and cardiogenic shock. (See Figure 4) It is extremely doubtful that these patients could have been salvaged.

It is not our desire to compare our low mortality rate (9.4 per cent) with higher ones elsewhere under similar conditions (18 per cent), but to merely point out what can be accomplished in a small community hospital coronary care unit with respect to early detection of life-threatening situations and prompt appropriate treatment of them. It is apparent from this study that one of

CAUSES OF DEATH IN CCU PATIENTS	
VENTRICULAR FIBRILLATION-----	NO. 1
CARDIOGENIC SHOCK-----	6

Figure 4

the main causes of death in acute myocardial infarction, namely, serious arrhythmias, was effectively handled to the extent that the mortality rate during the early phase was drastically reduced from that of the pre-coronary care unit era.

Unfortunately, the system of intensive coronary care has not produced a concomitant reduction in deaths from power failure of the heart, i.e., shock and congestive heart failure, and the current fatality rate from these causes is no lower than in the pre-coronary care era. In a well-organized coronary care unit about 90 per cent or more of all deaths are now due to power failure. Once overt power failure exists, the mortality rate is high and there is little reason to believe that this fatality

CORONARY CARE / Rosenblatt

rate will be reduced until better therapeutic measures are developed in the future.

A survey of experiences in various centers indicates that death occurs in 50 per cent of all patients with overt congestive heart failure and probably in more than 70 per cent of those with shock. One possible answer to this problem might be the prevention of overt power failure by prophylactic inotropic therapy with digitalis preparations, and this is to be further investigated by our group.

From our experience so far, it appears that the entire success of coronary care units presently depends upon the competence of nurses who have been specifically trained to recognize the major complications of acute myocardial infarction and who, because of special training, are able, by themselves, to initiate corrective measures as the situation demands.

As indicated previously, to further reduce the early mortality rate of acute myocardial infarction patients more effective treatment or cardiogenic shock will have to be found and earlier recognition of congestive heart failure stressed with consideration of prophylactic digitalization.

SUMMARY

Results of a segmental study of 74 patients with acute myocardial infarction admitted to the coronary care unit of a 200-bed private hospital have

been presented. The mortality rate during a four-day stay in the unit was 9.4 per cent.

A high incidence (95.9 per cent) of cardiac arrhythmias was detected during this early period and effectively treated.

The success of this coronary care unit appears to be explained by the high level of competence of the nursing personnel who were specially trained to recognize the major complications of acute myocardial infarction and to promptly initiate corrective measures. ★★★

1151 North State St. (39201)

This study was supported by NIH Grant No. HE 09430-02.

REFERENCES

1. Meltzer, L. E.; Pinneo, R., and Kitchell, J. R.: Intensive Coronary Care, Philadelphia CCU Fund, Presbyterian Hospital, 1963.
2. The Current Status of Intensive Coronary Care, Symposium presented by The American College of Cardiology and Presbyterian-University of Pennsylvania Medical Center, July 15, 1966, New York, N. Y., The Charles Press.
3. Rothfeld, E. L.; Bernstein, A.; Parsonnet, V.; Zucker, I. R., and Allinsonorin, C. A.: Telemetric Monitoring of the Electrocardiogram in Acute Myocardial Infarction, *Dis. Chest* 51:193, 1967.
4. Julian, D. G.; Valentine, P. A., and Milter, G. G.: Disturbances of Rate, Rhythm and Conduction in Acute Myocardial Infarction, *Am. J. Med.* 37:915, 1964.
5. Kurland, G. S., and Pressman, D.: The Incidence of Arrhythmias in Acute Myocardial Infarction Studied with a Constant Monitoring System, *Circulation* 31: 834, 1965.

IRATE ECONOMY

The Scotsman came home unexpectedly to find his unfaithful wife in the embrace of her lover. Enraged, the husband loaded his single shot rifle and ordered them to stand one in front of the other so he could do the job with a single bullet.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 16-20, 1968, San Francisco, Calif.; Clinical Convention, Dec. 1-4, 1968, Miami Beach, Fla. F. J. L. Blasingame, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

American Academy of General Practice, Annual Meeting, Sept. 13-20, 1968, Las Vegas, Nev. Mr. Mac F. Cahal, Executive Director, Volker Blvd. at Brookside, Kansas City, Mo. 64112.

Southern Medical Association, Annual Meeting, Nov. 18-21, 1968, New Orleans, La. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 100th Annual Session, May 13-16, 1968, Jackson. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. S. E. Field, Jr., Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, December, 6:30 p.m., Primos Northgate Restaurant, Jackson. Carl D. Brannan, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, First Monday January and July, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Robert L. Forman, Coahoma County Hospital, Clarksdale, Secretary.

Coast Counties Medical Society, First or Second Wednesday, January, March, May, September, and November. C. D. Taylor, Jr., 113 Davis Ave., Pass Christian, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St.. Greenwood, Secretary.

DeSoto County Medical Society, Second Thursday, January, April, July, and October, 1:00 p.m., Mary's Restaurant, Hernando. Malcolm D. Baxter, Jr., McIntosh-Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Homochitto Valley Medical Society, First Tuesday Quarterly, Jefferson Davis Memorial Hospital, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. A. Derrick, Jr., Durant, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December, Corinth. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Oxford. M. Beckett Howorth, Jr., 2200 S. Lamar Blvd., Oxford, Secretary.

Pearl River County Medical Society, Second Monday March, June, September, and December. Joseph C. Griffing, Lucius Olen Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, December. J. M. Griffith, 824 Second Ave. North, Columbus, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. John E. Green, Green Clinic, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Patrick G. McLain, 1301 Washington St., Vicksburg, Secretary.



The President Speaking

'The Physician's Loyalty'

TEMPLE AINSWORTH, M.D.

Jackson, Mississippi

THE REFINEMENT OF MEDICAL ORGANIZATION is often the envy of other professions. For one thing, medicine is the proud possessor of one of the strongest—and most genuinely representative—"backbone" organizations in its trilevel structure of the local component medical society, the state association, and AMA. Many other professions, notably in the physical sciences, lack this main bond of intradisciplinary organization, having only a hodge-podge of what we physicians call specialty societies.

While we can and do speak in the voice of the majority, we sometimes find ourselves a little fragmented, too. We have countless specialty societies, allied interest groups, single disease organizations, associations interested in various technics or agents, and an endless host of professional circles. It is not always easy to unify the loyalty of every member of a profession to one organization, and we in medicine have learned some difficult lessons on the need for unity.

More likely than not, our specialty societies can come nearer commanding our total loyalty than any other group to which we contribute our interests, time, and substance. It is a perfectly natural thing to do, because we have the broadest possible common ground with our fellow practitioners whose spheres of professional interests are identical to our own. Moreover, each different sphere of interest also encompasses special problems peculiar to a given specialty, including general or family practice.

Recently, the American College of Surgeons noted that it had not always enjoyed the benefit of a cordial environment with the AMA but that things were getting better. The ACS called upon its Fellows to take an active part in the AMA and "to give it the same loyalty that they have abundantly manifested toward this College."

That's good advice for any physician in any field of medical interest. Our state association and AMA are what we make them, and they need our loyalty. ★★★



Deck the Halls With Flash-Burned Fingers

I

SILENT NIGHT has become a curiously anachronistic way of describing Christmas, and each Independence Day sounds as if the Revolutionary War were being fought all over again. The sound and fury is the transplanted East Asian custom of whooping it up with fireworks, and it might not be so bad if it were just a matter of sound. Regrettably, fury is also in the picture.

Of all seasonal mishaps and injuries, none is more tragic nor more completely unnecessary than fireworks accidents. But the most tragic aspect of all is the occasional fireworks-related death, usually a child, at that. Almost any physician can expect to see the unpleasant results of bringing in Christmas and the New Year with a bang. They range from minor flash burns to lost eyes and fingers, from evulsion of soft tissue to death itself. The rage of society over all of this in January usually softens to a blasé attitude by March, so it's pretty difficult to get up steam in the legislature with remedial laws aimed at curbing the tragedy.

Most ophthalmologists and many general surgeons speak frequently about curbing the sale and use of dangerous fireworks, and for many years, the state medical association has taken the position that they should be outlawed altogether. Even rigorous enforcement of the laws already on the statute books would be a tremendous improvement, but many observers believe that more drastic action is clearly indicated. The issue couldn't

be more timely, because in about three weeks, some happy celebrants will honor the season with fire and gore. Even Ebenezer Scrooge did better than that; he ignored the occasion altogether.

II

Chapter 5, Mississippi Code of 1942, Annotated, contains eight brief sections relating to the manufacture, sale, possession, and use of fireworks. Except for one amendment passed in 1966, the entire law dates only to 1960. On the surface, it appears adequate as regards protection of the public safety. Its transiation may lose a little something, however, in the hospital emergency room.

Section 7015-01 *et seq.* prohibits the manufacture, sale, possession, and use of all fireworks in Mississippi except for Class C common fireworks, as defined and labeled under Interstate Commerce Commission requirements. This means no more than two grains in weight of explosive content, described by the state law as being "safe and sane items, including . . . cone fountains, small Chinese crackers, small nonexplosive Roman candles and rockets, and similar nondangerous items . . ." Paper caps for the small fry's toy shooting irons and sparklers are exempt, as are pyrotechnic signals used by railroads and highway vehicles.

The law is explicit about storage and display safety, too, requiring warning signs, proscription of smoking, and fire-fighting apparatus. No item of fireworks may be ignited or exploded nearer

than 75 feet to places of storage and sales displays nor closer than 600 feet to a hospital, church, or school.

Least known about the Mississippi fireworks laws, perhaps, is the fact that there are only 50 legal sale days per year for the noisemakers. Section 7015-05 of the enactment prohibits the sale of fireworks at retail before June 15 and after July 5 and before December 5 and after January 2. The minimum legal age of a purchaser is 12 years. And of course, county boards of supervisors and governing bodies of municipalities may regulate traffic in fireworks further or prohibit it altogether.

In 1966, penalties for violations of the fireworks law were stiffened, and the state medical association supported the proposal. Violations were re-defined as felonies punishable by fines up to \$1,000 and/or imprisonment not to exceed one year. Those injured or killed may bring suits—or have suits brought in their behalf—against violators who have sold illegal fireworks found to be the cause of injury or death.

Tighter enforcement would help, but outlawing fireworks would be better.

III

In a precedent-making action last October, members of the West Mississippi Medical Society, meeting at Vicksburg, unanimously adopted a resolution expressing concern “with the unnecessary injuries suffered by children shooting fireworks” and calling on all citizens and law enforcement agencies to lend full cooperation to upholding the local ordinance which outlaws fireworks in Vicksburg. Realistically, the society pointed out that the police “cannot be expected to arrest small children . . .”

But the society didn't stop with the resolution: The membership also purchased a quarter page advertisement in the October 15 *Vicksburg Sunday Post* in which an open letter to the citizens of Vicksburg and Warren County from the physicians was published. In making its appeal, the society pledged the support of each physician in the prevention of injury and death from fireworks accidents.

The doctors' action quickly drew the editorial support of the newspaper. The editor appealed for public endorsement of the physicians' stand, asserting that “the doctors are fully informed as to the results of fireworks tragedy . . .” The editorial characterized the firecracker as “a lethal

weapon,” applying the same definition to “the torches, the rockets, and the torpedoes which have been beefed up to the point that they pose a danger not only to those who use them but to the general public.”

IV

A number of members of the legislature have a deep interest in the prevention of fireworks injury and death by tougher laws. Even if the sale of fireworks were a major industry in Mississippi which it is not—the noise notwithstanding—the public interest should take precedence over commercial venture where the latter contributes significantly to avoidable injury and even death.

As the Christmas season approaches, it is with deep despair that we know in advance that there will be needlessly maimed or dead children at the time when all ought to have reasons for joy. And it's not quite enough to have only the force of persuasion as a means of preventing mishaps and worse.

A number of physicians, especially ophthalmologists, have said that they intend to make photographic records of patients having fireworks accidents this Christmas. Many feel that serious testimony before committees of the legislature isn't enough; they must be shown in shocking detail exactly what happens with some of the “safe and sane” firecrackers permitted by law. It might help, too, like letting a child somewhere live to enjoy another Christmas.—R.B.K.



If hypothyroidism leaves your patient feeling like this...

consider

LETTER[®]

**(SODIUM LEVOTHYROXINE,
ARMOUR) TABLETS**

Synthetic Thyroid Replacement Therapy



Letter[®] provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

and

Letter[®] is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter[®] is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER[®] is recommended. **Precautions and Side Effects:** Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage:** Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available:** Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).



ARMOUR PHARMACEUTICAL COMPANY • CHICAGO, ILLINOIS

Legalize Cultism? Let's Say 'No' Again!

The biennial effort to make a sham of Mississippi's sound health laws by licensing a cult is just around the legislative corner. From various corners of the state, there have been rumblings of activity by the chiropractors as they make overtures to members of the Legislature and circulate drafts of the same tired old bill by which they hope to have the badge of respectability and sanction of the state conferred upon quackery.

As before, the legislative endeavor would "regulate" chiropractic, but also as before, the "regulating" arm of state government would be a board made up exclusively of chiropractors. Worse yet, certain of their acts would be defined in law as proper "practice" thereby legalizing what is now actionable under the Medical Practice Act.

All arguments for raising chiropractic standards, improving education, and imposing regulation notwithstanding, there is only danger and hazard in letting the bars down to a cult. Were a chiropractor educated for 20 years, he would still be the disciple of a false and discredited dogma and the follower of a totally unscientific cult. He is not competent to diagnose disease, and as a matter of fact, he has no concept of disease entity, because he says that all pathology is caused by "subluxations" or pinched nerves.

He opposes immunization against disease, so now he has the job of explaining why the poliomyelitis nerve has suddenly become "unpinched" in just about everybody.

It must be kept in mind that not a single school of chiropractic is accredited by any recognized educational accrediting body in the United States. The degree this cultist hooks onto the end of his name is listed as spurious by the U. S. Office of Education in its formal listing of recognized academic degrees. The Department of Health, Education, and Welfare does not recognize chiropractic in any of its many activities and programs.

Chiropractors may not practice in any federal hospital, be it VA, Public Health Service, or military medical installation. They are not eligible for appointment as medical officers of government or armed services.

No hospital accredited by the Joint Commission on Accreditation of Hospitals may permit a chiropractor any practice privilege—state law not-

withstanding—on pain of forfeiting its accreditation. And not least, the United States Supreme Court has held that a state may refuse to license chiropractors if they fail to meet the same educational standards required of doctors of medicine.

In the last analysis, there is no rational basis for giving this cult the blessing of the state, society's badge of respectability as to their unscientific beliefs, or professional recognition in law. On the contrary, the state has the responsibility of withholding recognition of this cult, and this responsibility has been steadfastly carried out in Mississippi since the "discovery" of chiropractic in 1895 by an unsuccessful grocer named Palmer.

Let the protection of the public health be the first interest of all during the 1968 Regular Session of the Legislature. This includes—most prominently—*not* licensing any cult.—R.B.K.

More RN's for Mississippi

Expanding programs of medical service, the unbelievable growth of medical facilities, and the mounting demand for medical care by a progressively bigger population have interplayed to make the supply of nurses a critical quality in the health care equation. Much has been written and said



"You don't have to worry about a thing—on the way here I found a four-leaf clover."

about nurse education, its trend, and the closing of many of the smaller training schools. But it may be that long-term benefits of all these goings-on are beginning to be realized, because the picture in Mississippi is brighter.

In 1954, the Legislature enacted laws requiring the Board of Trustees of Institutions of Higher Learning to establish and administer uniform standards for nursing training accreditation. From this charge to the Board has come three types of accredited training programs:

There is first the familiar hospital diploma school or, in the language of the accrediting agency, hospital controlled programs. Usually three years in duration, the first nine months of the hospital training program is received in colleges or universities. The candidate for admission to the program must be a high school graduate.

Second is the associate degree program, usually organized as an integral part of a community or junior college curriculum. Some associate degree programs are, however, conducted in senior colleges and universities. Programs are usually of two years duration, and applicants must meet the admission requirements of the training institution as well as those of its nursing program.

The baccalaureate degree program may be conducted only in an institution of higher learning accredited to confer the bachelor of science degree in a four year curriculum. The applicant must meet usual college or university admission requirements. At present, only the University Medical Center and University of Southern Mississippi conduct degree training programs.

Graduates of all three programs are eligible for examination under Mississippi law to become registered nurses.

At present, there are five hospital diploma programs, 10 associate degree programs, and the two baccalaureate degree programs. But there is a significant development in all of this:

Since 1949, there has been a decrease in the number of schools of nursing. This has been a basis for some criticism of the system of nurse education, and on some occasions, it has brought forward discussion of the accrediting agency itself. A low in the number of schools was hit in 1959 when there were only 11 in the state, a drop of 50 per cent from the 1949 total of 22 schools.

But in 1967, there are 17 schools among which all but five are related to institutions of formal education. And the five hospital controlled programs are conducted by five of the finest hospitals in Mississippi.

Of greatest significance is what has happened

in total student enrollment: In 1949, there were 520 enrolled in 22 training programs with 360 new admissions that year. In 1959, there were 568 students in 11 programs with 266 new enrollees. But in 1967, there are 929 students in 17 accredited nurse training programs with 439 new admissions recorded. The picture is getting brighter in nurse training, and the quality is going up.—R.B.K.

Closeted Skeletons in Auto Safety

The automobile manufacturing industry may have been experiencing more than its share of woes, but the Detroit climate got a little gloomier recently when two Wayne State University professors read a scientific paper on automotive safety research. It seems as if one of the car makers' better kept secrets came to the surface, and however good the end sought, it was a question of the means involved.

For some years, auto safety investigators have used human cadavers from time to time in crash tests to determine impact effects on the human body. The argument for this practice is that testing with dummies and live animals can go only so far in supplying reliable information. After the practice was publicized recently, the Associated Press quoted auto industry representatives as admitting that they dreaded any publicity about the program.

Actually, the tests are said to have been undertaken in a highly scientific manner, using cadavers from Wayne State's school of medicine. The school, in turn, obtained the cadavers from the county morgue from among unidentified bodies. The recently released research report stated that "embalmed cadavers are used in this research since they are the closest to living humans in weight distribution and dynamic reactions, and embalmed bones have approximately the same strength as living bone."

Science and society's notion of propriety sometimes wander apart, making for difficult public relations problems. Any serious scientific, sincerely undertaken research effort aimed at prevention of injury and conservation of human life is worthy, give or take the gray areas which can grow up from situations which might involve morality or violations of law. Without condemnation or approval of the auto industry practice, it is still quite apparent that the interpretation of the research to the public lacks a little something.—R.B.K.



PERSONALS

ELDON L. BOLTON of Biloxi has been elected president of the Metropolitan Dinner Club, an organization of professional, business, industrial, and civic leaders on the Mississippi Gulf Coast. RICHARD G. BURMAN of Gulfport was named a director of the club for a three year term. A recent speaker before the group was Gen. Maxwell Taylor, retired chairman of the Joint Chiefs of Staff and currently special adviser to the President.

THERESA L. BUCKLY of Biloxi was honored by the St. Martin Lions Club for her service in the sight conservation program. During recent ceremonies at Gulf Hills Dude Ranch, she was awarded a special certificate.

H. REED CARROLL has been elected chief of staff for 1967-68 at the Greenwood Leflore Hospital. Serving with him are GUY P. SHARPE, JR., vice chief of staff, and JOHN F. LUCAS, JR., secretary, both of Greenwood. Executive committee members elected are FRED M. SANDIFER, chairman; J. WELDON LAMB, and JOHN F. LUCAS, SR., also of Greenwood.

DAVID L. CLIPPINGER of Hazlehurst headed a glaucoma detection program sponsored by his local Lions Club. Of 476 persons tested during the program, 48 suspected cases of glaucoma were discovered together with five patients with pterygium, four cataracts, and 14 individuals with incorrect lenses in glasses.

CHARLES E. FARMER of Jackson has announced the opening of his offices in the Hinds Professional Building. He limits his practice to general and thoracic surgery.

JOSEPH C. GRIFFING of Picayune has been elected chief of staff of the Lucius Olen Crosby Memorial Hospital for 1967-68. Other officers of the staff are CLAUDE J. BLACKBURN, vice chief of staff, and JAMES M. HOWELL, secretary, also of Picayune.

JOHN E. HARRIS of Okolona has announced the opening of his offices at 117 Robertson St., the site of his new clinic building.

M. E. HINMAN of Vicksburg is serving as president of the Mississippi Historic Foundation which is currently engaged in preserving historic landmarks in the Vicksburg area. The foundation re-

cently purchased the Governor McNutt property at Monroe and First East Sts., and work is beginning on grounds improvement.

WESLEY W. LAKE of Gulfport, chairman of the Mississippi Heart Association's District IX, presided at a recent six county meeting. In his chairman's address, Dr. Lake reported on recent advancements in cardiovascular research.

WILLIAM C. MCQUINN, H. A. KROEZE, and GEORGE C. HAMILTON, JR., have announced the removal of their offices to 385 Medical Drive adjacent to Doctors Hospital. The group limits its practice to psychiatry.

CURTIS D. ROBERTS has announced the opening of his offices in McLaurin Medical Center in McLaurin Mart located on U. S. 80 in Rankin County between Brandon and Jackson. He will limit his practice to pediatrics.

RICHARD E. SCHUSTER of Brandon has been named chairman of the Health Committee of the Rankin County Chamber of Commerce.

C. D. TAYLOR, JR., of Pass Christian has been elected 1967-68 chief of staff of the Memorial Hospital at Gulfport. He succeeds O. D. DABBS, JR., of Gulfport who served during 1966-67. The new vice chief of staff is E. T. RIEMANN, JR., and the secretary-treasurer is ONEY C. RAINES, III, both of Gulfport.

NORMAN W. TODD of Newton has occupied his new clinic building at 1011 S. Main St. Dr. Todd designed the building and supervised its construction. Because of unique innovations desired in the building, Dr. Todd secured an electrician's license from the city so that he could assist in actual installation.



LETTERS

SIRS: The special article by Dr. George D. Purvis of Jackson in the August issue of the JOURNAL (J.M.S.M.A. VIII:455-458 (Aug.) 1967) on workmen's compensation forms was informative, but hardly explains the need for "paper work and red tape."

I can appreciate the need for accurate reporting for the benefit of the third party payor, but someone ought to appreciate the plight of the attending physician.

Every case covered by workmen's compensa-

tion requires several forms. In many instances there is a single visit to the office or hospital emergency room involved. The charge may be only \$5 or \$10. It is rather annoying and certainly uneconomical for me to have to complete the special forms required for such small charges.

It has long been my practice to use this standard Health Insurance Council insurance report form for all insurance cases. This standard form is much more readily completed, furnishes all the pertinent information needed for anyone, and when used with NCR copy, provides a file copy immediately.

I can see no good reason why these forms cannot be used for workmen's compensation cases. Certainly, information is the important consideration, not the format in which it is presented. Use of these forms would certainly be a time saver in my office and probably for others as well.

Of course, if there is some good explanation as to the need of the "official" forms, the above argument would be negated. Thus far I have not been able to determine any reasons, and Dr. Purvis did not present any other than to state that it is required by law.


I am reminded of the old military adage, "There is no reason for it, it is just our policy."

I would suggest that the Committee on Occupational Health recommend that HIC forms be accepted as approved means of reporting industrial accident information to insurance carriers.

E. C. STONE, M.D.
613 S. LAMAR ST.
OXFORD, MISS. 38655



DEATHS

 AUSTIN, RICHARD BAKER, Forest. M.D., Tulane University, New Orleans, La., 1910; interned Tulane Hospital, New Orleans, La.; postgraduate training at Mayo Clinic; past president of Central Medical Society and past vice president of MSMA; member Fifty Year Club and Emeritus member of MSMA; Died October 8, 1967, aged 82.

WELBORN, LOCKE L., Senatobia. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1913; interned Protestant Hospital, Norfolk, Va., 1912; and St. Joseph's Hospital, Memphis, Tenn., 1913; died October 14, 1967, aged 76.



NEW MEMBERS

HEY, JOHN PHENIS, III, Greenwood. Born Greenwood, Miss., July 5, 1939; M.D. University of Mississippi School of Medicine, Jackson, Miss., 1964; interned Mississippi Baptist Hospital, Jackson, Miss., one year; residency Medical Field Service School, Brook Army Medical Center, Fort Sam Houston, Texas; elected October 11, 1967, by Delta Medical Society.

HOPSON, WILLIAM BRIGGS, JR., Vicksburg. Born Delhi, La., September 20, 1937; M.D. University of Tennessee College of Medicine, Memphis, Tenn., 1961; interned John Gaston Hospital, Memphis, Tenn., one year; residency in general surgery John Gaston Hospital, Memphis, Tenn., five years; elected August 10, 1967, by West Mississippi Medical Society.

HULL, CLARENCE G., III, Hollandale. Born Greenwood, Miss., August 15, 1938; M.D. University of Mississippi School of Medicine, Jackson, Miss., 1964; interned University Hospital, Jackson, Miss., one year; residency (internal medicine) University Hospital, Jackson, Miss., six months; residency (dermatology) University of Arkansas Medical Center, Little Rock, Ark., 15 months; elected October 11, 1967, by Delta Medical Society.

SANDEFUR, JOHN CARROLL, Greenville. Born Mt. Sterling, Ky., July 18, 1931; M.D. University of Tennessee College of Medicine, Memphis, Tenn., 1956; interned John Gaston Hospital, Memphis, Tenn., one year; residency Madigan General Hospital, Ft. Lewis, Wash., four years; elected October 11, 1967, by Delta Medical Society.

VICK, WALTER DEAN, Greenville. Born Water Valley, Miss., June 1, 1927; M.D. University of Tennessee College of Medicine, Memphis, Tenn., 1957; interned Medical Center, Columbus, Ga., one year; residency Kapiolania Hospital, Honolulu, Hawaii, three years; elected October 11, 1967, by Delta Medical Society.

YELVERTON, RICHARD LEROY, Jackson. Born Jackson, Miss., July 31, 1935; M.D. University of Mississippi School of Medicine, 1960; interned University Hospital, Jackson, Miss., one year; residency University Hospital, Jackson, Miss., four years; elected September 5, 1967, by Central Medical Society.

If it doesn't work in a week, forget it.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and re-

port immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis, ex-

In rheumatoid arthritis, Butazolidin alka needs only a week's trial. If it doesn't work in a week, forget it.

A short trial period may spare patients weeks of discomfort. That's one reason why Butazolidin alka seems a good choice when aspirin fails.

It's not for every patient. Check carefully the Contraindications, Warning, and Precautions shown below.

And adverse reactions may occur. The most common are nausea, edema and rash. Rarely, agranulocytosis has been reported. All adverse reactions are listed below, too.

You'll know quickly if it works.
And most of the time, it will.



foliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Rheumatoid Arthritis: Initial: 3 to 6 capsules or tablets daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules or tablets daily; response is often achieved with 1 or 2 capsules or tablets daily. 6509-V(B)R2

For complete details, please see full prescribing information.

Butazolidin[®] alka

Capsules: phenylbutazone, 100 mg.; dried aluminum hydroxide gel, 100 mg.; magnesium trisilicate, 150 mg.; homatropine methylbromide, 1.25 mg.

Also available: Butazolidin[®], phenylbutazone: Tablets of 100 mg.



Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

BU-5412S

Synirin®

ACETYSALICYLIC ACID (ASPIRIN)..... 5 GR.
 *PENTOBARBITAL (ACID)..... 1/8 GR.
 *Warning: may be habit-forming

Synirin provides prompt barbiturate potentiation of aspirin without limiting the therapeutic usage of aspirin. Both pentobarbital and aspirin begin their action together promptly and last 4 or 5 hours. There is no accumulation.

LITERATURE AND CLINICAL SUPPLY AVAILABLE TO PHYSICIANS

*SYNIRIN is another
 pharmaceutical achievement*

WM. P. POYTHRESS & CO., INC.
 RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856



POSTGRADUATE CALENDAR

SEMINAR ON DIAGNOSIS AND MANAGEMENT OF THE ANEMIC PATIENT

November 30

This program, sponsored by the University of Mississippi postgraduate education committee and the Department of Clinical Laboratory Sciences, is designed for physicians in every phase of medicine.

Lecturers will be Dr. Warren Bell, professor of clinical laboratory sciences and chairman of the department and associate professor of medicine; Dr. Gordon Deraps, instructor in medicine and director of the clinical cancer training program; Dr. William F. Stapp, assistant professor of clinical laboratory sciences, and Dr. Robert Thompson, assistant professor of clinical laboratory sciences.

MODERN MANAGEMENT OF COMMON OBSTETRICAL PROBLEMS

University Medical Center, Jackson
 December 14, 1967, beginning at 9 a.m.

Sponsored by the University of Mississippi School of Medicine with partial support from Eli Lilly and Company and the Merck Sharp and Dohme Postgraduate Program.

Participants

Stewart Fish, M.D., professor of obstetrics and gynecology and chairman of the department, University of Tennessee School of Medicine, Memphis

Abe Mickal, M.D., professor of obstetrics and gynecology and chairman of the department, Louisiana State University School of Medicine, New Orleans

George Ball, M.D., clinical instructor in obstetrics and gynecology, University Medical Center

Karl Bolten, M.D., associate professor of obstetrics and gynecology, University Medical Center

Richard Boronow, M.D., assistant professor of obstetrics and gynecology, University Medical Center

John Choate, M.D., assistant professor of obstetrics and gynecology, University Medical Center

Calvin Hull, M.D., assistant professor of obstetrics and gynecology, University Medical Center

Lois Mosey, M.D., associate professor of obstetrics and gynecology, University Medical Center
Henry A. Thiede, M.D., professor of obstetrics and gynecology and department chairman, University Medical Center
William B. Wiener, M.D., clinical associate professor of obstetrics and gynecology, University Medical Center
Winfred Wiser, M.D., assistant professor of obstetrics and gynecology, University Medical Center.

Thursday Morning

WELCOME

Dr. Robert E. Carter, dean and director
MATERNAL MORTALITY IN MISSISSIPPI
Dr. Wiener
OBSTETRICAL HEMORRHAGE—ITS CAUSE AND TREATMENT
Dr. Fish
Discussion: Dr. Mickal
THE MANAGEMENT OF PREMATURE RUPTURE OF THE MEMBRANES
Dr. Ball
Discussion: Dr. Thiede


Thursday Afternoon

RECOGNITION AND TREATMENT OF FORCE DYSTOCIA
Dr. Mickal
Discussion: Dr. Fish
MANAGEMENT OF THE ABNORMAL PAP SMEAR IN PREGNANCY
Dr. Boronow, Dr. Bolten
REPORTS IN BRIEF ON SOME NEW TECHNIQUES IN:
Erythroblastosis, Dr. Wiser
Hydatidiform Mole, Dr. Choate
Paracervical Block, Dr. Mosey
Central Venous Pressure, Dr. Hull

FUTURE CALENDAR

November 30
DIAGNOSIS AND MANAGEMENT OF THE ANEMIC PATIENT
December 8
CARDIOPULMONARY RESUSCITATION
December 14
MODERN MANAGEMENT IN COMMON OBSTETRICAL COMPLICATIONS
January 3, 10, 17, 1968
CIRCUIT COURSE, BILOXI
January 4, 11, 18, 1968
CIRCUIT COURSE, HATTIESBURG

removes the mental blur



that clouds vision

SOLFOTON[®]

Each tablet or capsule contains
PHENOBARBITAL.....16 mg.
(Warning: may be habit forming)
BENSULFOID[®] (See P D R).....65 mg.
Precaution: same as 16 mg. of phenobarbital



Constructive Therapy

A Solfoton tablet or capsule at 6 hour intervals maintains sedation at the threshold of calmness, sustaining a mental climate for purposeful living.
Literature and clinical samples sent upon request.

FEDERAL LAW PROHIBITS DISPENSING
WITHOUT PRESCRIPTION

AVAILABLE

Solfoton (yellow, uncoated tablets "P")
100s, 500s, 5000s
Solfoton Capsules (yellow and brown)
100s, 500s, 1000s
Solfoton S/C (sugar-coated beige tablets)
100s, 500s, 4000s

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

POSTGRADUATE / Continued

<i>January 5, 1968</i> OTOLARYNGOLOGY IN GENERAL MEDICAL PRACTICE	<i>March 14-15, 1968</i> RELIGION AND MEDICINE
<i>January 23, 1968</i> CIRCUIT COURSE, COLUMBUS	<i>March 27-29, 1968</i> CARDIOVASCULAR SEMINAR
<i>January 25, 1968</i> ALIMENTARY TRACT PROBLEMS	<i>April 1-2, 1968</i> AMERICAN BOARD OF SURGERY
<i>February 1, 1968</i> UMC DAY	<i>April 2, 1968</i> CIRCUIT COURSE, MERIDIAN
<i>February 15, 1968</i> NEUROLOGY SEMINAR (DISEASES OF CHILDREN)	<i>April 11, 1968</i> DIABETES SEMINAR
<i>February 20, 1968</i> CIRCUIT COURSE, NATCHEZ	<i>April 16, 1968</i> CIRCUIT COURSE, NATCHEZ
<i>February 27, 1968</i> CIRCUIT COURSE, COLUMBUS	<i>April 18, 1968</i> THORACIC SOCIETY
<i>March 1, 1968</i> RENAL DISEASE SEMINAR	<i>April 23, 1968</i> CIRCUIT COURSE, COLUMBUS
<i>March 5, 1968</i> CIRCUIT COURSE, MERIDIAN	<i>May 7, 1968</i> CIRCUIT COURSE, MERIDIAN
	<i>May 13-16, 1968</i> MISSISSIPPI STATE MEDICAL ASSOCIATION

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation of and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.

Assistant Professor of Psychiatry and Medical Director

Area Code 704-253-2761



Book Reviews

Handbook of Orthopaedic Surgery, Seventh Edition. By Alfred R. Shands, Jr., M.D., and R. Beverly Raney, Sr., M.D. 572 pages with illustrations. St. Louis: The C. V. Mosby Company, 1967. \$12.00.

This Seventh Edition of the *Handbook of Orthopaedic Surgery* accomplishes admirably its stated objective: "presentation of the fundamental facts and principles of orthopaedic surgery as concisely as possible and yet in sufficient detail to convey a well-rounded knowledge of the subject."

While not intended to be a detailed textbook suitable for advanced study of the subject, its scope of coverage is startlingly comprehensive. It presents the very latest general concepts of orthopaedic diseases, skeletal affections, deformities, tumors, and trauma, and it outlines the most recent generally accepted methods of treatment.

I wholeheartedly recommend it as the standard orthopaedic desk reference book for general practitioners, surgeons, internists, and pediatricians, and it will be a valuable aid to medical students, interns, and residents.

T. C. TURNER, M.D.

Manual of Preoperative and Postoperative Care. By the Committee on Preoperative and Postoperative Care, American College of Surgeons. 506 pages. Philadelphia: W. B. Saunders Company, 1967. \$8.50.

This manual of preoperative and postoperative care, prepared by a committee of the American College of Surgeons, is well organized and fills a great need for a ready reference to the surgeon responsible for patient care. The manual is an outgrowth of the postgraduate course on this topic presented at the annual clinical congresses of the American College of Surgeons. The editorial subcommittee was comprised of Dr. Henry T. Randall, Chairman, and Drs. James D. Hardy and Francis D. Moore. They state that they have endeavored to provide a useful guide for the preoperative and postoperative management of surgical patients, together with descriptions of the metabolic and physiologic principles that underlie successful treatment.

The editors, with the help of a group of twenty-five distinguished clinicians, succeed admirably in their purpose. General principles are discussed in the first half of the book, covering such topics as fluid and electrolyte balance; special considerations in pediatric surgery; clotting disorders; infection, and shock. In the second half of the book, patient care is discussed in the surgery of specific body organs and systems. The monitoring of the central venous pressure as a guide to further fluid therapy and transfusions in the critically ill surgical patient is emphasized in the discussion of shock, severe ileus, and in the management of pulmonary edema. The physiologic basis of therapy is well presented.

The tone of many of the chapters is necessarily dogmatic since this is a manual for ready reference by the surgeon in training as well as for the busy clinical surgeon. Dr. E. R. Woodward feels that tube gastrostomy is superior to, and in large measure replaces, prolonged nasogastric suction. The complications of tube gastrostomy are not discussed, presumably because of the limitation of space. Dr. Gilchrist states that poor risk patients who undergo colon surgery often suffer from too much nursing attention! In this era of nursing shortage, it seems unlikely that this is universally true. The remainder of this chapter on surgery of the colon and rectum is quite informative.

Well substantiated clinical studies have indicated the effectiveness of the routine use of anticoagulants to prevent the complications of thromboembolism after abdominal hysterectomy, combined abdominoperineal resection, or after bilateral inguinal hernia repair in patients over the age of forty. The manual recommends the routine use of anticoagulant therapy 48 hours postoperatively in the patients subjected to the operations listed above. In actual practice, such wide scale prophylactic use of anticoagulant therapy is seldom employed.

Several of the authors employ an outline form in presenting tried and true methods of preoperative and postoperative care. The authors are carefully selected authorities, and their preferences are presented in many instances without discussion of alternative methods.

There is an appendix of normal blood, plasma,

BOOKS / Continued

and serum values, presented with the caution that the surgeon should determine what the normal range is for the specific laboratory for each commonly used test. Function tests and selected surgical diets are also presented. Nomenclature and equivalent values in acid-base balance are presented clearly in the appendix.

There is a wealth of information in this manual which is well edited, and it would seem likely to enjoy a wide circulation. It is probable that this manual will go through many subsequent editions so well does it fulfill its purpose.

W. COUPERY SHANDS, M.D.

Manual on Alcoholism, the American Medical Association, Chicago, 1967, 87 pages, 50 cents.

Public policy is coming around to the view that alcoholism is not a crime, not a reflection of moral turpitude, not the mark of the shiftless, but an illness.

The change in attitudes is reflected in new legislation, court rulings, and increasing awareness of alcoholism's enormous social and economic costs.

An new Manual on Alcoholism, published by the American Medical Association, comes at a time when practical medical guidelines are needed in dealing with this problem.

In 87 pages, the AMA's new manual defines alcoholism and sets out its causes. It describes the metabolism and pharmacology of alcohol, and offers suggestions on diagnosis and the physical, psychological, and sociological aspects of treatment.

In plain language, it tells what an alcoholic is and is not, and what physicians can do to help him.

Alcoholism is typically associated with physical disability and with impaired emotional, occupational, and social adjustments. In short, it is "a type of drug dependence of pathological extent and pattern which ordinarily interferes seriously with the patient's health and his adaptation of his environment."

A comprehensive review of the many treatment techniques would be beyond the limitations of a manual of this type. A "primer" approach, however, might have deteriorated into sets of recipes or formulae which preclude judgment and become outdated rapidly.

The manual's editors arrived at a reasonable compromise. Basic general information is pre-

sented in the text, and more specific considerations are outlined in an appendix. The appendix sections include: (1) "Clues" to aid in the diagnosis of alcoholism, (2) General considerations in managing the hospitalized alcoholic, (3) Immediate considerations when the alcoholic patient enters the hospital, and (4) Alcohol blood levels and intoxication.

Thirteen authorities submitted resource information for the manual. This material was edited and a final manuscript written by Dr. Robert J. Shearer, former associate director of the AMA Department of Mental Health.

The manuscript was reviewed and is approved by the AMA Council on Mental Health and its Committee on Alcoholism and Drug Dependence.

The manual is available from the Order Handling Unit, American Medical Association, 535 N. Dearborn St., Chicago, Illinois 60610. Prices are 50 cents a copy in the U. S., its possessions, Mexico, and Canada (40 cents a copy for medical students, interns and residents in those countries), and 60 cents in all other countries.

Books Received

JOURNAL MSMA has received the following books for review. Selections will be made for more extensive reviews in the interest of readers and as space permits. Further information on the books listed will be furnished on request. Physicians are urged to submit reviews of additional books which, in their opinion, merit comment.

A Textbook for Medical Assistants. By M. Murray Lawton, M.D. and Donald F. Foy, B.S., M.D. 452 pages with illustrations. St. Louis: The C. V. Mosby Company, 1967. \$8.85.

Insurance for the Doctor. By Harvey Sarnet, LL.B., 193 pages. Philadelphia: W. B. Saunders Company, 1967. \$9.00.

The Office Assistant in Medical Practice. By Portia M. Frederick and Mary E. Kinn. 461 pages with illustrations. Philadelphia: W. B. Saunders Company, 1967. \$7.50.

Synopsis of Gynecology. By Daniel W. Beacham, M.D. and Woodard D. Beacham, M.D. 384 pages with illustrations. St. Louis: The C. V. Mosby Company, 1967. \$8.50.

Diabetes Mellitus: Diagnosis and Treatment, Vol. 2. Edited by George J. Hamwi, M.D. and T. S. Danowski, M.D. 250 pages with illustrations. New York: The American Diabetes Association, 1967. \$2.50.



Live Color TV Presentations, Surgery Will Highlight 100th Annual Session

The 100th Annual Session of the Mississippi State Medical Association will measure up to a centennial celebration with a new high in scientific communications. The Council on Scientific Assembly has announced that live color television will be used during five of the six general sessions. Telecasts will originate at the University Medical Center for closed-circuit reception in the Heidelberg Hotel, annual session headquarters.

Dr. Walter H. Simmons of Jackson, chairman of the council, said that Smith, Kline and French, the long-established Philadelphia-based maker of ethical pharmaceuticals, will furnish the TV production unit, staff, and technical equipment. Ordinarily available to national medical meetings and large regional and state conclaves, the SKF appearance in Mississippi scores a notable first for the association.

Dr. William O. Barnett of Jackson, chairman of the association's Council on Medical Education,

with the individual sections of the Scientific Assembly.

While the medical color TV will carry much of the program highlights, there will also be conventional presentations from the meeting hall rostrum by association members and out-of-state guests essayists.

Five TV program segments are scheduled during May 14-16, Dr. Barnett said. Telecasting will begin on Tuesday morning, May 14, and continue through Thursday morning, May 16. Each telecast will cover a single topic with in-depth discussion and live case presentations.

Both live surgery and wet clinic presentations will be made. Moderators have been appointed to conduct each of the telecast sessions, Dr. Barnett added.

The general session on surgery opens the Scientific Assembly on May 14 with the TV segment of the program devoted to conditions of the breast. Plans call for live surgery, a radical mastectomy, together with a panel discussion. Dr. J. Harvey Johnston, Jr., of Jackson, will be panel moderator. Section officers are Drs. Raymond S. Martin, Jr., chairman, and Carl D. Brannan, secretary, both of Jackson.

The afternoon general session on May 14 has been organized by the Section on Obstetrics and Gynecology. The live TV presentation will be a caesarean section. Additionally, a panel presentation will also be included as Dr. James L. Royals of Jackson serves as moderator. Dr. John E. Lindley of Meridian is section chairman, and Dr. J. Purvis McLaurin, Jr., of Oxford is secretary.

May 15 will be given to medical presentations with a morning general session sponsored jointly by the General Practice and Preventive Medicine sections. Two TV presentations, the only double segment, are scheduled.

Dr. James G. Thompson of Jackson will moderate a panel presentation to be telecast covering a range of subjects in dermatology. Case presenta-



Dr. Joseph B. Rogers, president-elect, left, and President Temple Ainsworth, right, receive a briefing on the color TV spectacular in the Scientific Assembly at the 100th Annual Session from Dr. Walter H. Simmons, meeting chairman.

is television chairman for the annual session. In a recently completed meeting series, Dr. Barnett has coordinated the full bill of scientific TV fare

ORGANIZATION / Continued

tions will show various lesions in selected patients as a panel discusses these conditions.

The second TV segment on the Wednesday morning session is devoted to thyroid conditions with Dr. Herbert G. Langford of Jackson acting as moderator.

Officers of the sponsoring scientific sections are, for General Practice, Drs. C. R. Jenkins of Laurel, chairman, and Hardy B. Woodbridge, Jr., of Jackson, secretary; and for Preventive Medicine, Drs. Rhea L. Wyatt of Holly Springs, chairman, and Frank J. Morgan, Jr., of Jackson, secretary.

The Wednesday afternoon general session is under the Section on Medicine with a color TV presentation on neurological conditions. Dr. Robert D. Carrier of Jackson will moderate the telecast. Section officers are Drs. William C. Kellum of Tupelo, chairman, and C. Ralph Daniel, Jr., of Jackson, secretary.

The fifth TV segment is set for Thursday morning, May 16, when the Section on Pediatrics supervises the general session. The video presentation will have as its subject skeletal problems in infants and children, and Dr. George D. Purvis of Jackson will moderate the panel. Section officers are Drs. Charles P. Tharp of Tupelo, chairman, and William F. Sistrunk of Jackson, secretary.

Dr. Simmons said that the annual session will formally open Monday morning, May 13, with the House of Delegates. Reference committee sessions are set for the afternoon, following the format successfully instituted last year which eliminates conflict with the scientific sessions.

The annual social occasion, described by association spokesmen as a fun evening without parallel in recent years, is slated for May 15.

Site of the annual session is the Hotel Heidelberg where the scientific and technical exhibits will be presented and where both the House of Delegates and Scientific Assembly will be convened. The color telecasts will originate from a special studio and from operating suites at UMC to be piped by closed circuit to the headquarters hotel.

New SKF video equipment offers large screen viewing through light amplification projection in high resolution color.

Meeting concurrently will be about 15 specialty societies, and a number of luncheon and banquet occasions are being planned. Medical alumni from Ole Miss, Tennessee, Tulane, and Vanderbilt will conduct reunion and fellowship occasions on May 13 and 14.

The Woman's Auxiliary will conduct its 45th

Annual Session, according to Mrs. David L. Clippinger of Hazlehurst, state president. Meeting arrangements are being completed for early release, Mrs. Clippinger said.

Rounding out the scientific fare, Dr. Simmons said that the Section on Eye, Ear, Nose, and Throat will meet on Thursday morning, May 16. The adjourned meeting of the House of Delegates is set for that afternoon.

At the 1967 annual session, the House of Delegates voted to schedule the 1969 meeting and all thereafter for the Gulf Coast "until such time as more adequate and suitable convention facilities are made available at Jackson, when a rotation schedule may again be considered."

Blue Plan Exec Is Institute Adviser

Dr. J. C. Woosley of Jackson, president of Mississippi Hospital and Medical Service (Blue Cross-Blue Shield), has been appointed to the National Advisory Council of the Leonard Davis Institute of Health Economics, recently established

by the University of Pennsylvania in Philadelphia. The appointment was announced by Dr. Gaylord P. Harnwell, president of the university.



Dr. Woosley

Funds to support the institute have been made available by Leonard Davis, a resident of New York, who was instrumental in establishing some years ago the first national health insurance

plan for retired persons.

Dr. Luther Terry, vice president for medical affairs at the University of Pennsylvania and former surgeon general of the United States, will serve the institute as chairman of the National Advisory Council. The council consists of 22 members from all parts of the country who represent such fields as medicine, hospital management, public health, insurance, and health care protection.

Purpose of the institute is to develop a nationwide program of study and research in an effort to help solve some of the serious problems relative to the economic and social aspects of health care.

New Keogh Plan Doubles Tax Savings

The 1966 amendments to the Keogh Act, voluntary retirement plans for the self-employed, become effective on Jan. 1, 1968, permitting a doubling of the amount of conservation which may be tax-deferred. Effective with any tax year after 1967, a qualified individual may salt away 10 per cent of before-taxes income or \$2,500 annually, whichever is the lesser.

The new amendments also liberalize the methods by which the retirement fund may be conserved. Interest yield and growth, where securities are purchased or other earnings are realized, is not subject to taxation until drawn after retirement.

Association spokesmen said that interest among Mississippi physicians on the program had increased substantially with the prospect of a more equitable tax break for the self-employed.

Qualified individuals establishing a voluntary retirement program must contribute a like percentage to a fund for any employee who is full time and has been on the job for three years or

longer. The association has had a voluntary retirement plan for members with the Deposit Guaranty National Bank of Jackson since 1962.

Vicksburg Society Urges Fireworks Ban

Appealing to citizens of Vicksburg and Warren County to help in preventing injury and death from fireworks accidents, members of the West Mississippi Medical Society acted unanimously to adopt a resolution calling for enforcement of local laws banning the sale, possession, and use of noise-makers.

The society purchased space for a quarter page advertisement in a recent edition of the *Vicksburg Sunday Post* for publication of an open letter of concern from local physicians. In the letter, the society called for the cooperation of all citizens and law enforcement agencies in observance of state and local statutes. Fireworks are illegal in Vicksburg and Warren County.

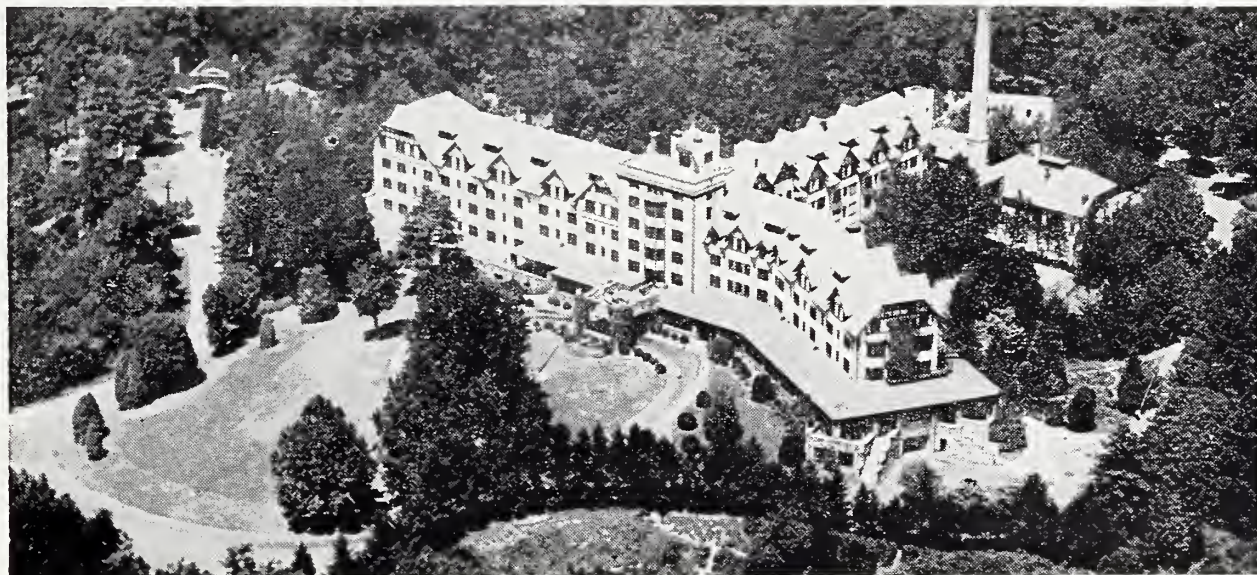
The *Vicksburg Sunday Post* quickly gave editorial support to the society's action, joining the crusade to prevent "the horrible fate of death or being maimed by fireworks."

APPALACHIAN HALL

ESTABLISHED — 1916

ASHEVILLE

NORTH CAROLINA



An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habitation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

WM. RAY GRIFFIN, JR., M.D.
ROBERT A. GRIFFIN, M.D.

MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information, write: APPALACHIAN HALL, ASHEVILLE, N. C.

Clarksdale Society Names 1968 Officers

The Clarksdale and Six Counties Medical Society conducted its 131st Semi-Annual Session at Clarksdale Nov. 1 and named officers for 1968. Dr. Robert T. Hollingworth of Shelby, 1967 president, presided over the scientific session and evening banquet.

Named as 1968 officers were Drs. Thad S. Rodda of Clarksdale, president; Walter T. Taylor of Clarksdale, secretary; and five vice presidents, Drs. C. S. Phelps of Marks, T. K. Chandler of Tunica, Steve C. Leist of Clarksdale, and T. T. Lewis of Charleston. Dr. Donald R. Ellis of Clarksdale was re-elected to a term on the society's Board of Censors.

Dr. Temple Ainsworth of Jackson, president of the state medical association, addressed the banquet session. Mrs. David L. Clippinger of Hazlehurst, president of the Woman's Auxiliary to MSMA, was principal speaker at the society's Auxiliary meeting.

Guest essayists appearing at the scientific session were Drs. James T. Robinson and Matthew W. Wood of Memphis, neurological surgeons. Drs. Thad S. Rodda and Frank T. Marascalco of Clarksdale presented two cases of unusual fatal cerebral complications following surgery.

1968 Dues Billing Will Include PAC's

Billings by component medical societies of the state association for 1968 dues will include dues for the Mississippi and American Medical Political Action Committees. The joint billing was voted by the House of Delegates at the 1967 annual session.

Dr. Howard A. Nelson of Greenwood, chairman of MPAC, said that the goal is to sign the entire membership up in the crusade for sound, conservative government and physician-participation in political affairs. The minimum dues for MPAC and AMPAC is \$10 each, a total of \$20 for the year.

Payment of PAC dues is voluntary and is not deductible for tax purposes, Dr. Nelson said. The state medical association, in transmitting the House of Delegates' endorsement of the joint billing procedure to secretaries of component so-

cieties, asked that the voluntary and nondeductible aspects be clearly stated on the billing statement.

Two component societies adopted the joint billing practice in 1966 prior to the House action, and together, they had a majority of PAC members in the state.

MPAC is a voluntary, nonprofit, nonpartisan political action committee, organized separately and apart from the state medical association. The PAC is governed by a 10 member board consisting of a physician from each of the nine association districts and a director from the Woman's Auxiliary. There are two officers, Dr. Nelson, the chairman, and Dr. E. Leonard Posey, Jr., of Jackson, secretary-treasurer.

Members of the association are also encouraged to send PAC dues for their wives who are eligible for membership. Payment should be made through secretaries of local societies at the time of paying annual component, state, and AMA dues.

Robins Completes New Research Addition



Symbolizing the completion of a \$2.6 million addition to A. H. Robins Company's research center in Richmond, construction manager Joseph Noonan presents a large flask to assistant vice president Dr. Carl Lunsford, director of the center. Looking on (left to right in lab coats) are Dr. Oscar Klioze, director of pharmacy research and analytical services; Dr. Herndon Jenkins, associate director of chemical research; Robert Eagles, manager of research engineering; and Dr. John Ward, director of pharmacological research. The new wing, part of which may be seen in the background, contains approximately 54,000-square feet of space, doubling the size of the facility opened in February 1963.

ACOG Releases Study on 'The Pill'

The most extensive survey to date on the use and effects of oral contraceptives was released to the public by *McCall's* magazine. Over 6,700 members of the American College of Obstetricians and Gynecologists participated in the study, the first ever made in conjunction with the College. The College membership was informed of the survey results in the October issue of the ACOG Newsletter. The survey report brings together for the first time the collective observations of the specialists who have had the broadest experience with oral contraceptives.

Details of the authoritative study, particularly the benefits and risks of oral contraceptives, are revealed in *McCall's* article. Possible physical side effects of the pill were explored at length in the study, as well as psychological effects.

An unprecedented 90 per cent of the 8,522 Fellows answered a detailed questionnaire on the pill, prepared by the American College of Obstetricians and Gynecologists. Replies from 79 per cent—6,733 specialists in the United States and

Canada—were analyzed by computer and the results compiled by *McCall's*.

The results of the survey show 95 per cent of the specialists feel oral contraceptives are safe enough to prescribe for their patients and 87 per cent give it more frequently than any other family-planning method. Patients request the pill over every other contraceptive method, reported 96 per cent of the physicians surveyed. "The survey reveals an overwhelming acceptance of the pill by the College," says Dr. John S. Lyle, chairman of the ACOG's Committee on Public Education.

University Hospital Names Associate Chief

D. Andrew Grimes has been named associate director of University Hospital in Jackson, effective November 1.

Grimes, who comes to the University Medical Center from Vanderbilt University Hospital where he was administrative research coordinator and senior assistant director, holds the A.B. degree from Washington and Jefferson College and the M.S. degree from the University of Pittsburgh. He has also studied at Cornell University.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205-836-7201

**A patient centered
independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 42 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:
James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

HILL CREST is a member of:
AMERICAN HOSPITAL ASSOCIATION . . .
. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals.

**Hill Crest
HOSPITAL**
BIRMINGHAM, ALABAMA

Diarrhea

TROCINATE® 400 MG.
BRAND THIPHENAMIL HCl.

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.



WM. P. POYTHRESS & CO., INC.

RICHMOND, VIRGINIA 23217

Manufacturers of ethical pharmaceuticals since 1856



GP Academy Names 1968 Officers

Dr. C. R. Jenkins of Laurel was named president-elect of the Mississippi Academy of General Practice during the closing session of the group's 19th Annual Scientific Assembly at Jackson, and Dr. Joseph E. Johnston of Mt. Olive was inaugurated president. The 1967 president was Dr. Eldon L. Bolton of Biloxi.

Other officers elected were Drs. Robert L. Holley of Oxford, vice president; W. H. Parker of Heidelberg, secretary-treasurer; John R. Bane of Jackson, delegate to AAGP; and A. T. Tatum of Petal, alternate delegate to AAGP.

Continuing to serve as AAGP delegate and alternate delegate are Drs. John B. Howell, Jr., of Canton and R. J. Moorhead of Yazoo City.

Essayists appearing before the meeting included Dr. Robert E. Carter of Jackson, dean and director of the University Medical Center; Juanita I. Woods, R.P.T., of Jackson; J. T. Gilbert, R.P.T., of Jackson; Dr. Buris R. Boshell of Birmingham; and Dr. C. Harrison Snyder of New Orleans.

Also appearing on the scientific program were Drs. Thomas L. Leaman of Hershey, Pa.; Eugene H. Countiss of New Orleans; Thomas L. Kilgore of Jackson; Alton B. Cobb of Jackson; Paul H. Moore of Pascagoula; and Robert F. Carter, Jr., of Biloxi.

The Academy is governed by a 10-member Board of Directors. Miss Louise Lacey of Jackson is Executive Secretary.

Dr. Raney Is 50 Year Club Inductee

Dr. Daniel H. Raney of Mattson has become the newest member of the state medical association's 50 Year Club. He was inducted into the honorary organization during the recent November meeting of the Clarksdale and Six Counties Medical Society.

Participating in the ceremonies were Drs. E. LeRoy Wilkins of Clarksdale and Temple Ainsworth of Jackson, association president. Dr. Wilkins, a 50 Year Club member and past president of the state medical association, served as a medical officer with Dr. Raney during World War I in France.

Dr. Raney, a native Mississippian, received his medical degree from the University of Texas School of Medicine at Galveston in 1917. He

underwent postgraduate training at St. Louis City Hospital and in Edinburgh, Scotland. He has practiced continually at Mattson in Coahoma County since 1919.

Also present for the occasion was a third member of the half century honor circle, Dr. I. P. Carr of Clarksdale.

Seventh MSMA-Robins Award Is Scheduled

The Seventh Annual Mississippi State Medical Association-Robins Award for outstanding community service by a state physician has been announced to the component medical societies by the Board of Trustees. The 1968 award will be presented at the 100th Annual Session during closing ceremonies on May 16.



MSMA-Robins Award

Drs. Temple Ainsworth, president, and John B. Howell, Jr., chairman of the Board of Trustees, said that each component medical society has been invited to submit a nomination for the honor. The award is co-sponsored annually

by the association and the A. H. Robins Co. of Richmond, Va., a long-established manufacturer of ethical pharmaceuticals.

Drs. Ainsworth and Howell said that nominees must be members of the state medical association and that the community service recognized by the local society's nomination must be apart from purely professional attainment, since suitable awards in that connection already exist.

Generally, the service by the physician-nominee should have benefitted the local or state communities in a civic, cultural, or general economic sense. It need not, however, have been a single achievement, since many outstanding citizens contribute to community betterment through a series of services in varying leadership roles.

Nominations should be made by letter, and there are no restrictions upon length or attached exhibits which assist in establishing the nominee's qualifications and record of achievement. Drs. Ainsworth and Howell said that each letter of nomination must be signed by an officer of the component medical society.

Deadline for submission of nomination to the state medical association is Jan. 31, 1968. Each nomination will be acknowledged, and the Board of Judges, consisting of the three state association vice presidents, will review the nominations in February.

The award series was instituted in 1962, and six Mississippi physicians have been recipients of the high honor. They are Dr. Thomas G. Ross of Jackson, nominated by the Central Medical Society in 1962; Dr. Frank M. Davis of Corinth, by the Northeast Mississippi Medical Society in 1963; Dr. Howard A. Nelson of Greenwood, by the Delta Medical Society in 1964; Dr. Maura J. Mitchell of Ellisville, by the South Mississippi Medical Society in 1965; Dr. J. T. Davis of Corinth, by the Northeast Mississippi Medical Society in 1966; and Dr. Frank M. Acree of Greenville, by the Delta Medical Society in 1967.

The award is a sculptured bronze plaque in *bas* relief, engraved, and mounted on a mahogany panel.

California Offers 'Neuronurse' Training

The first graduate training program in the United States to prepare clinical nurse specialists in neurological and neurosurgical nursing has been established by the School of Nursing at the University of California San Francisco Medical Center. The two-year post bachelor's degree program is partially supported by a \$68,220 Public Health Service project grant announced by the National Center for Chronic Disease Control.

According to Dr. Clifford H. Cole, Chief of the Center's Neurological and Sensory Disease Control Program which funded the project, this course is unique for this nursing specialty. The program affords opportunity for the professional nurse to explore new ways in which to provide care, give leadership and stimulate or participate in research to meet the complex nursing needs of the neurologically handicapped.

The first year of study is designed to fulfill the requirements of the master of science degree in nursing in the clinical field of medical-surgical nursing. Courses in medical-surgical nursing, research, and perspectives in nursing will provide the students opportunities to extend their interest, knowledge and competence in clinical nursing. Students will select neurological and neurosurgical facilities for the clinical nursing experience. Emphasis will be placed on development of skill in

assessing nursing needs of patients and the nursing process required to meet their needs.

During the second year of study students will develop knowledge and expertise in neurological and neurosurgical nursing. In addition to graduate study in medical-surgical nursing, courses in acute and long term nursing care of neurological and neurosurgical patients, rehabilitation, nursing, neuroanatomy, neurophysiology and social psychology of physical disabilities are included.

OEO, AAP Make Head Start Pact

A new partnership between Project Head Start and the pediatricians of America has been announced by the Office of Economic Opportunity and the American Academy of Pediatrics.

Sergeant Shriver, director of OEO, and Dr. William S. Anderson, president of the AAP, in a joint statement, said that the Academy will organize and direct the Medical Consultation Program of Head Start child development programs in nearly 2,000 communities throughout the United States.

The Academy has chosen Dr. Robert S. Mendelsohn, a pediatrician from Chicago, and formerly medical director, Project Head Start, Cook County Office of Economic Opportunity, to direct the program.

Shriver welcomed the wholehearted support offered to the program by the Academy which represents more than 10,000 pediatricians in the U. S., Canada, and Latin America. The AAP, to a large extent, has set the standards for child health care both in this country and abroad.

Shriver stressed that this contract represents a new type of relationship between an agency of the Federal Government and a voluntary professional organization. In effect, the American Academy of Pediatrics has accepted a major responsibility for ensuring that the health services provided to Head Start children adequately meet the health needs of these children, their families, and the community in which they live.

Dr. Anderson said that initially, the AAP will select about 300 physician consultants from its membership and from other leaders in the field of child health, to evaluate the medical aspects of the Head Start program at the state and local level. He emphasized that as more physicians gain experience in working in community health programs, their increased skills and knowledge will

make their advice more valuable in planning and carrying out those programs which require partnership between physicians and government.

Each medical consultant selected will work with the medical director and other health professionals in Head Start projects.

He will review the medical aspects of Head Start applications submitted by a community; meet with local planning committees to map out Head Start medical programs; maintain contact with program medical directors; follow up and evaluate programs, and maintain liaison with OEO regional and national offices.

Consultants will work with the Office of Economic Opportunity representatives responsible for funding and evaluating Head Start health programs, helping them interpret the needs of the children, the resources of the community, and the success of the Head Start programs. The consultant will supplement, rather than replace, the medical and administrative skills available in each community.

Further commenting on the program, Dr. Anderson pointed out that "the Academy executive board and staff are enthusiastic about the opportunity this program offers for developing responsible pediatric leadership in an important area of child health programming."

"I believe this is an activity which will most certainly expand," Dr. Anderson emphasized, "and could set an important trend in the programs of medical organizations."

MIC Prepares New Construction Plan

The 1968 revision to the Mississippi Plan for Construction of Comprehensive Community Mental Health Centers has been prepared by the Mississippi Interagency Commission on Mental Illness and Mental Retardation for submission to the Surgeon General, United States Public Health Service.

Dr. Dorothy N. Moore, program director for the M.I.C., said today that the annual revision is required by law in order to update statistical data relating to Mississippi programs and resources, as well as to report on program developments over the most recent fiscal year.

She said copies of the revised plan are on file for review by the general public in the offices of the M.I.C., located in Room 223, Medical Towers Building, 440 East Woodrow Wilson, Jackson.

The commission is composed of the chief executive officers of five state agencies—C. Seth Hud-

speth (Board of Trustees of Mental Institutions), chairman; Dr. A. L. Gray (State Board of Health), vice-chairman; Miss Frances Gandy (Department of Public Welfare); Dr. E. R. Jobe (Board of Trustees, Institutions of Higher Learning); and J. M. Tubb (State Superintendent of Education).

The commission was created by the state legislature in 1966 to spearhead statewide development of mental health and mental retardation programs at the regional level, through multi-county pooling of financial support.

UMC Begins Nurse Anesthetist Program

The University Medical Center will register its first class of nurse anesthetists trainees in January, 1968, when a new 24-month training division is activated.

Expected to help fill the shortage of specially trained health professionals in Mississippi, the program will include basic theoretical instruction, clinical observation and practice, and the study of clinical anesthesia.

HIC Speaker Hits Hospital Costs

Are hospital costs escalating at a rate faster than any means of financing can match? This provocative question was put to the Eastern Leadership Conference of the Health Insurance Council by Richard L. Durbin, Administrator, Temple University Hospital in Philadelphia.

Durbin told the conference during a panel discussion that the "best predictions at this time" show hospital costs escalating 15 per cent this year, another 15 per cent in 1968, 10 per cent in 1969 and 6 per cent in 1970.

"By 1970," he said, "the costs will reach \$100 per day in most general hospitals.

"I don't know how you feel about it," he told the insurance men, "but it scares the living heck out of me."

Mr. Durbin said that about 70 per cent of hospital direct costs comprise salaries and that any effect on salaries effects 70 per cent of the hospital's operation. Services to the indigent, emergency rooms, delivery rooms, nurseries, intensive care facilities and teaching projects have had to be financed out of the "lucrative room and board rates charged to those who can carry the load," he said.

"Blue Cross and others of a third party nature, particularly the federal government, have been allowed to buy in a closed market on some basis, either reimbursable cost formula or variations less than charges," he said. "This process has thrown the burden primarily on consumers who buy either directly out of pocket or incurred expenses, or on those carrying commercial insurance who buy at an established base rate."

Durbin urged the HIC to support legislation to prorate insurance premiums on the basis of income of individuals. "This would mean," he said, "a nationwide plan of the commercial companies sponsored by the consumers, and the government picking up that portion the individual could not afford to buy from his own earnings."

Fellow panel member William C. Felch, M.D., discussed factors influencing physicians' fees. He is chairman of the health insurance liaison subcommittee of the American Society of Internal Medicine.

He told the conference that the vast majority of doctors are honest and scrupulous about determining fees.

"I would urge you," he said, "as consumers of health care and you, as insurers of health care, and you, as people dedicated to preserving the health care dollar, to join with the medical profession in creating a system in this country that will be efficient, comprehensive and high quality."

MSU Will Study Pesticide Poisoning

Mississippi State University has initiated a study of the effects of pesticides on human beings, and the research project will serve the medical profession with consultation and laboratory determinations in suspected cases of acute pesticide poisonings.

Dr. Reed Perron, a U. S. Public Health Service physician on assignment to MSU, is heading the study project. Headquarters are at the Delta Branch Experiment Station at Stoneville, and the study area is confined to the Mississippi Delta.

In a special communication to Dr. Temple Ainsworth of Jackson, president of the state medical association, Dr. Perron said that the project has the support of the State Board of Health and the U. S. Public Health Service. In another communication to physicians in the Delta area, he included a suggested sample collection protocol for cases of acute pesticide poisoning, especially where organophosphates are the suspected agents.

UMC Chair Is Renamed as Memorial

The Mississippi Heart Association Chair of Cardiovascular Research at the University Medical Center has been redesignated the Mississippi Love Research Professorship of Cardiology. The redesignation is in honor of the late Dr. William D. Love, first occupant of the chair, who died suddenly May 22, 1967.

The Mississippi Heart Association endowed the original chair and will continue to furnish \$20,000 annually for its support. The memorial action by the Board of Trustees of Institutions of Higher Learning was taken at the request of the heart association.

AABB Gets Therapy Workshop Grant

The American Association of Blood Banks disclosed that it has been granted \$633,044 over a five-year period by the Department of Health, Education and Welfare for workshops in blood and blood component therapy for physicians and medical personnel servicing cancer patients.

Dr. George J. Hummer of Santa Monica, Calif., association president, and Dr. John A. Shively of Houston, Tex., president-elect, will be co-directors of the project. The first workshop under it was held Oct. 21 at the Americana Hotel in New York City prior to the Association's 20th annual meeting.

"About 25 per cent of the blood used in America goes to cancer patients," explained Dr. Hummer. "In many cases the patients would be better served by the infusion of packed red cells rather than whole blood. It is established that platelets prolong the lives of leukemia patients. It is recognized that white cell poor blood is necessary for many patients. There is an increasing need for expanded plasma programs to provide components such as AHG, albumin, fibrogen, gamma globulin and other derivatives.

"Physicians are more appreciative of the benefits of component therapy. Through education and training, it is anticipated that there will be more effective use of available blood and the cost of therapy can be lowered for patients."

The AABB plans to conduct a series of workshops throughout the coming year in each of the five regions of the United States for the benefit of physicians and other medical personnel. Topics to be presented will be plasma technics, plasmapheresis procedures, packed red cells, platelet and other component preparations.

Bariatrics Society Sets Obesity Policy

The executive committee of the American Society of Bariatrics has announced the Society's endorsement of the American Medical Association's statement of policy regarding weight reduction practices.

In addition, the society has issued its own statement of policy regarding weight reduction practices which states in part:

"Members of the American Society of Bariatrics recognize that obesity is a panorama of diseases of multiple etiologies and with multiple signs and symptoms. They are required by their membership in the American Society of Bariatrics to obtain a complete patient history including full laboratory and physical tests to reveal the possibility and extent of disease conditions.

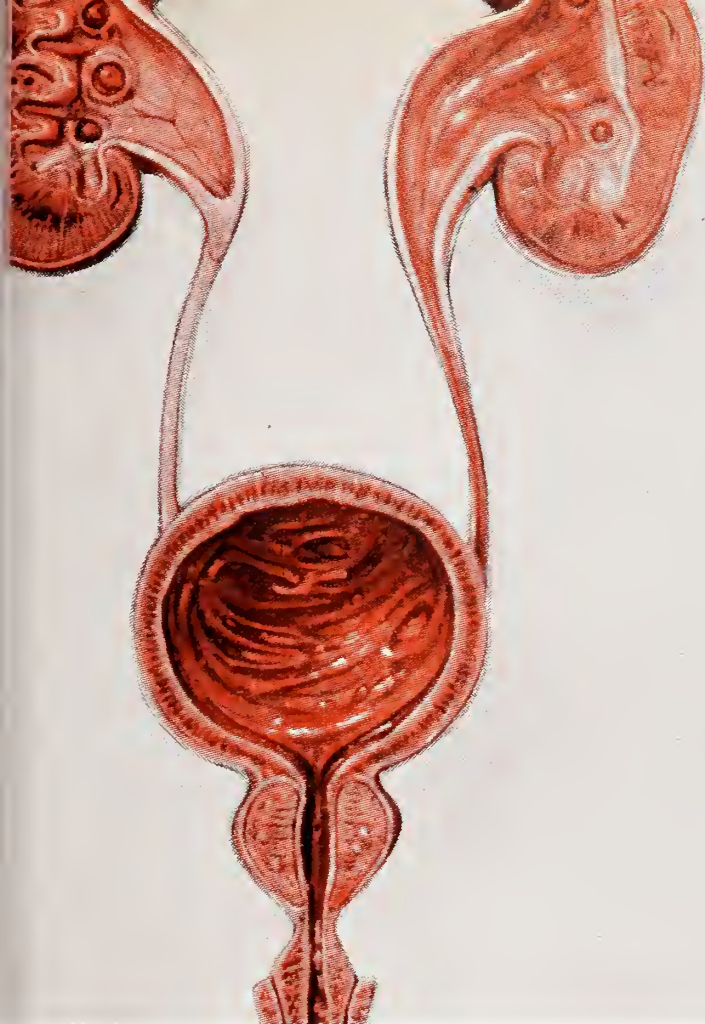
"The American Society of Bariatrics is opposed to physicians who do not conduct their bariatric practices in accordance with the above conditions and with the standards of the Society as set forth in its constitution and by-laws."

UMC Augments Medical Faculty

The University Medical Center has added four new full-time faculty members since early fall.

Added at the rank of assistant professor in the Department of Pharmacology and Toxicology was Dr. Madge Pfaffman, who comes from Duke University where she has been a postdoctoral fellow. She holds the M.S. and Ph.D. degrees earned at the University Medical Center.

New instructors in the School of Medicine are Dr. Virgilio Pilapil, pediatrics; Dr. David Stock, microbiology, and Dr. Ojus Malphurs, Jr., surgery (otolaryngology). Malphurs is also chief of audiology, Communication Disorders Clinic.



Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?
in any case,
usually gram-negative*

Therapy:

two 500 mg. Caplets® q.i.d.
(initial adult dose)

Summary of prescribing information

Indications: Urinary tract infections in which gram-negative bacteria are pre-dominant, particularly *Proteus*, *Escherichia coli*, *Aerobacter*, *Klebsiella*, and certain strains of *Pseudomonas*. Gram-positive bacteria are less sensitive to NegGram but favorable clinical results have been observed.

Warnings: Use in Pregnancy. This drug is not recommended in the first trimester of pregnancy. However, it has been used in several patients during the last two trimesters without producing apparent ill effects in either mother or fetus.

Precautions: As with all new drugs, periodic blood and liver function tests are advisable during treatment longer than 1 or 2 weeks. **This drug should be used with caution in patients with liver disease, epilepsy, severe cerebral arteriosclerosis, or severe impairment of kidney function.** Because photosensitivity reactions have been reported in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a photosensitivity reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not be arbitrarily doubled unless under the careful supervision of a physician. If bacterial resistance develops or additional nonsensitive strains emerge, other effective antibacterial agents should be added to or substituted for NegGram.

Interference with testing: In testing the urine for glucose in patients receiving NegGram, Clinistix® or Gent Strips or Tes-Tape® should be used since other reagents may give a false-positive reaction.

Adverse reactions: Mainly mild nausea, vomiting, and other gastrointestinal disturbances; less frequently, sleepiness, drowsiness, weakness, headache, dizziness, and vertigo, and rarely cholestasis, paresthesia, thrombocytopenia, anemia, or hemolytic anemia in patients with a deficiency in activity of glucose-6-phosphate dehydrogenase. Itching, pruritus, rash, urticaria, mild eosinophilia, reversible photosensitivity reactions primarily involving exposed areas, and reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity or double vision), occurred occasionally. Reversible increased intracranial pressure with bulging anterior fontanel, papilledema, and headache has been observed occasionally in infants and children. Toxic psychosis and brief convulsions (the latter generally in patients with possible predisposing factors, and both usually associated with excessive dosage) have been recorded in a few instances.

Dosage and administration: **Adults**—Four Gm. daily by mouth (2 Caplets® of 500 mg. four times daily) for one to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. daily (1 Caplet 500 mg. four times daily). **Children**—According to age and weight: approximately 25 mg. per pound of body weight per day, administered in divided doses.

Caution: The dosage recommended above for adults and children should not be arbitrarily doubled unless under the careful supervision of a physician. Until further experience is gained, infants under 1 month should not be treated with NegGram.

What is supplied:

For adults—Buff-colored, scored Caplets of 500 mg., conveniently available in bottles of 56 (sufficient for one full week of therapy) and in bottles of 1000.

For children—Caplets of 250 mg., available in bottles of 56 and 1000.

For more prescribing, please refer to complete prescribing information.

References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on request. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: *Antimicrobial Agents and Chemotherapy*—1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

NegGram®

Brand of
nalidixic acid
a specific anti-gram-negative

eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
- "Excellent" or "good" response reported in *more than 2 out of 3* patients with either chronic or acute gram-negative infections.¹

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: *E. coli*, *Klebsiella*, *Aerobacter*, *Proteus*, *Paracolon* or *Pseudomonas*²... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

Winthrop

Winthrop Laboratories, New York, N. Y. 10016

ORGANIZATION / Continued

Shield Reports High in Gains, Payouts

Record highs were reached during 1966 on the number of people served and medical-surgical benefits paid by Blue Shield, according to the annual report published by the National Association of Blue Shield Plans.

The association, headquartered in Chicago, is the coordinating body of the 84 Blue Shield Plans in the United States, Canada, and Puerto Rico.

The number of persons served by Blue Shield, which had been moving toward the 60 million mark, spurted to over 71 million—more than one-third of the population.

The Blue Shield Plans paid out over \$1.4 billion in benefits during 1966, up \$52 million from the previous year.

John W. Castellucci, NABSP president, said that there was a net gain of almost 2 million members in regular underwritten enrollment.

"Many of the elderly who had left Blue Shield's underwritten rolls to move to Medicare returned with the purchase of complementary coverage to fill gaps in the Medicare program," Castellucci said.

An increasing movement is currently underway throughout Blue Shield toward paid-in-full programs based on the usual and customary fees of physicians.

The common characteristic of these Blue Shield programs is that payments are based upon interpretation of the terms—usual, customary, prevailing, and reasonable.

Essentially, these programs are designed to pay—with predictable cost—the full charge of covered physicians' services for all subscribers, in a manner agreeable to the vast majority of local practicing physicians.

Paid-in-full reimbursement conceivably may cover half the prepayment market within the next five years.

Blue Shield is actively engaged in the development of new programs to meet the demands of the vast number of people now covered by the private sector, according to Castellucci.

He said the results of recent market studies indicate that dental care, prescription drugs, psychiatric care and professional services in-or-out of the hospital are among the areas of protection in which the public is showing greater interest.

"Dental coverage has been the subject of increased discussion in recent months," Castellucci indicated. "Local dental societies in many areas are in the midst of deciding whether to set up separate prepayment entities or to join Blue Shield and Blue Cross in providing such coverage."

AMA Forecasts Nurse Education Changes

Major changes in nursing education were forecasted by a Columbia University educator during a recent conference in Chicago for state medical societies liaison committees with nursing conducted by the American Medical Association's Committee on Nursing.

The conference was aimed at stimulating interest in and strengthening state level relationships . . . sharing experiences . . . understanding organized nursing and its goals . . . getting a comprehensive view of what has and is being done in the area of physician-nurse relationships at the state level . . . and in planning statewide conferences based on the national AMA-ANA conferences.

Forty-six state representatives, along with the Committee members and AMA staff personnel heard Dr. Eleanor C. Lambertsen, director of the Division of Nursing Education, Teachers College, Columbia U., discuss "Current Nursing Education and Practice."

In her presentation Dr. Lambertsen declared that the "health services available to the citizens of this nation are being adversely affected in both quantity and quality by shortages of physicians, nurses and other members of essential and emerging health disciplines."

Noting that the major problem is that of "talented manpower," Dr. Lambertsen emphasized that the future will see "more clearly defined areas of nursing practice and more clearly defined educational programs."

She said she "envisioned" three levels of workers—the clinical and general practitioners of nursing, and supportive nursing personnel.

"Attempts to solve the staffing problems of nursing service departments in all types of health institutions has been that of declaring that all types of education lead to the same ability for practice and therefore lead to indiscriminate assignments for patient care," said Dr. Lambertsen.

"The pattern coming into focus," she asserted, "is that of more clearly defined collaborative roles between nurses and physicians in practice which can only result in quality patient care services."

MPAC

AMPAC

give you **IMPACT**, doctor!

But make it a mutual impact, doctor, because your PAC needs you and you need your PAC. Both AMPAC and each of the 50 state PAC's are voluntary, nonprofit, unincorporated, autonomous groups whose members are physicians, their wives, and others in allied professions. Every group is bipartisan, bound by no party label. The voting record, platform, and program of a candidate—not his party—is what the PAC considers.

The basic purpose is twofold: To educate in political affairs and to provide a means through which the physician-citizen can effectively make his voice heard in the political arena. MPAC is medically oriented and medically directed by a 10 member board consisting of nine physicians and a Woman's Auxiliary representative.

With the elections behind, MPAC is looking ahead to 1968 when there will be a job to do. Make your voice count by sending your dues today, \$10 for MPAC and \$10 for AMPAC. Better send dues for your wife, too.



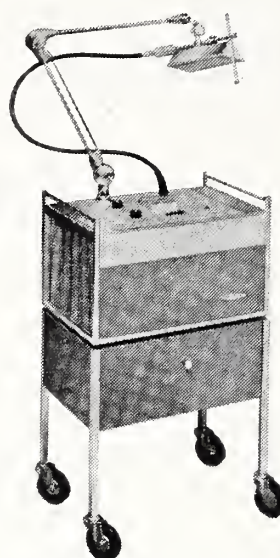
MISSISSIPPI MEDICAL
POLITICAL ACTION
COMMITTEE

DIRECTORS: Howard A. Nelson, M.D., Greenwood, Chairman □ E. Leonard Posey, M.D., Jackson, Secretary-Treasurer □ Robert L. Holley, M.D., Oxford □ Frank M. Davis, M.D., Corinth □ Paul B. Brumby, M.D., Lexington □ E. E. Robinson, M.D., Meridian □ James C. Bass, Jr., M.D., Laurel □ G. Swink Hicks, M.D., Natchez □ Kendall D. Gregory, M.D., Gulfport □ Mrs. R. Mayo Flynt, Meridian, Woman's Auxiliary

Index to Advertisers

In accepting advertising for publication, the JOURNAL has exercised reasonable precaution to insure that only reputable, factual advertisements are included. Nevertheless, claims made by advertisers in behalf of goods, services, and medicinal preparations, apparatus or physical appliances are understood to be those of the advertiser. Neither sanction nor endorsement of such is warranted, stated, or implied by the association.

	Page
Abbott Laboratories	16, 17, 18
Ames Company	6, 7
Appalachian Hall	729
Armour Pharmaceutical Co.	715
Blue Cross	8, 9
Burroughs-Wellcome	734B
Campbell Soup Co.	712A
Dorsey Laboratories	15
First Federal of Jackson	27
Geigy Pharmaceuticals	12, 13, 720, 721
Highland Hospital	724
Hillcrest Hospital	731
Hynson, Westcott, and Dunning ..	3
Kay Surgical	26
Lederle Laboratories	718A, insert facing 726
Eli Lilly	front cover, 22, 712D, 712E, 712F
Mississippi Medical Political Action Committee ..	25
New Orleans Graduate Medical Assembly	14
Parke, Davis and Co.	2
Pitman-Moore	20, 21
William P. Poythress	718D, 722, 723, 732
A. H. Robins Co.	18A, 18B, 19, 734A
Roche Laboratories	back cover
Sandoz Pharmaceuticals	718B, 718C, 718D
G. D. Searle	712B, 712C
Smith, Kline and French	10
Stuart Co.	4
Syntex Laboratories 734C, 734D, 734E, 734F, 734G, 734H	
Winthrop Laboratories	23
Thomas Yates and Co.	11

Burdick


DIRECTED, DEEP-TISSUE HEATING WITH THE MW-1 MICROWAVE UNIT

The MW-1's simplicity of operation and ease of electrode application have contributed much to the popularity of microwave diathermy. Microwave radiations can be reflected, focused and directed. Treatment intensities may be preset.

Write us for descriptive literature and complete price information.

KAY SURGICAL INC.
663 North State St. • Jackson, Miss.

Articles for Publication

Manuscripts should be typewritten, double spaced on one side of the paper. Tables, charts, and tabulations should be submitted on separate sheets but their position in the text should be indicated. Authors are encouraged to limit bibliographies to 10 references, written in conformation to style utilized in scientific publications of the American Medical Association. Articles are accepted for publication on the condition that they have not been previously published and are contributed solely to this JOURNAL.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text. Figures and drawings are acceptable when prepared with black ink on white paper. Photographs for illustrations should be unmounted, untrimmed, glossy prints and all such material must be identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Reprints may be obtained at cost from the association. The right is reserved to decline any manuscript for publication. Ordinarily, manuscripts submitted will be acknowledged whether published or not.

SUBJECT INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "L," Letters to the Editor; the asterisk (*) indicates an original article in the JOURNAL, and the author's name follows the entry in brackets. "Deaths,"

"Personals," and "New Members" are indexed under the letters "D," "P," and "M" respectively.

Matter pertaining to MSMA is indexed under "Mississippi State Medical Association." For the author index see page 744.

A

Abortion
what can be done and what may be done [Kennedy] 661-E

Accidents
fireworks—need for stronger state laws to prevent [Kennedy] 713-E;
West Mississippi Medical Society urges ban of fireworks, 729-N
motor vehicle, an unsolved problem [Derian] *198

Addiction
glue-sniffing said escape from reality, 335-N

Ainsworth, Temple
member, Board of Governors of American College of Surgeons and executive committeeman of American Urological Association [Kennedy] 669-E

Alcohol
Medical Association of Georgia, campaign against moonshine [Kennedy] 502-E

Allergy
conditions of eye, nose and throat [Sanders] *695

American Academy of General Practice
Committee on Mental Health, receives federal research grant, 436-N

William E. Lotterhos named chairman of the Board of Directors, 680-N

American Academy of Orthopaedic Surgeons
practical course on emergency aid and transportation of critically ill and injured persons, 175-N
sports medicine postgraduate course, 438-N

American Academy of Pediatrics
honors Michigan surgical pioneer, 632-N
1967 annual meeting, 636-N
1967 annual spring session, 181-N
partnership with Project Head Start, 734-N

American Association of Blood Banks
gets therapy workshop grant, 736-N

American Association of Medical Assistants
loans for medical assistants training available, 450-N

American Cancer Society
Mississippi Division, 1967 annual meeting, 686-N

American College of Cardiology
1967 annual meeting, 60-N

American College of Chest Physicians

Southern Chapter, Campbell, Guy D., elected vice-president, 109-N

American College of Obstetricians and Gynecologists
study on "The Pill," 734-N

American College of Physicians
Southeastern regional meeting, 586-N

American College of Radiology
study of move toward separate billing, 169-N

American College of Surgeons
Board of Regents, wants physicians on hospital boards, 394-N
crusade against fee-splitting [Kennedy] 240-E

Louisiana-Mississippi regional meeting, 116-N
1967 combined sectional meeting, 53-N

receives NIH cancer grant, 515-N

American Diabetes Association
new president, 505-N

publishes classification of genetic diabetes mellitus, 633-N

American EEG Society
sets continuation course in clinical electroencephalography, 60-N

American Geriatrics Society
grants for residents available, 258-N

American Heart Association
accepts applications for fellowships, 512-N

new medical director named, 109-N
1967 scientific sessions, 508-N

publishes sodium diet booklet, 182-N

American Hospital Association
establishes unique health research center with Northwestern University, 692-N

finds minimum wage zooms hospital costs, 396-N

says hospital costs rate doubles, 579-N

Wilson, David B., president, 627-N

American Medical Association
Commission on Research, the mixed blessings of the federal dollar [Kennedy] 423-E

Committee on Cutaneous Health, dandruff symposium, 381-N

Committee on Maternal and Child Care, First International Conference on Prematurity, 678-N

Congress on Occupational Health, George D. Purvis to address, 578-N; Dr. Purvis discusses study of occupational health programs in small plants, 678-N

Council on Medical Service, Committee on Medical Facilities, sponsors Conference on Utilization Review, 646-N

Council on National Security, Committee on Disaster Medical Care, sponsors trauma symposium, 632-N

Council on Occupational Health, survey to learn more about industrial workers' adverse reactions to hazardous materials, 584-N

Department of Legal Research, study of court decisions relating to anesthesia, 340-N

Education and Research Foundation, not just another worthy cause [Kennedy] 615-E

film library, increases services, 176-N

First National Conference on Emergency Medical Services, 264-N

Judicial Council—issues guides for physicians' listings in telephone directories, 331-N; rules on specialty board hassle, 676-N

library among nation's best, 640-N

Lotterhos, William E., named member of Council on Scientific Assembly, 694-N

medical careers booklets available, 176-N

1967 clinical convention—courses, 642-N; program announcement, 628-N

policy on orphanhood praised [Kennedy] 238-E

program to boost home health services, 319-N

volunteer physicians for Viet Nam, new field director named, 641-N

American Political Action Committee

joint dues billing with MPAC, 730-N

American Society of Bariatrics
endorses AMA obesity policy, 736-N

Anesthesia

AMA study of court decisions concerning, 340-N

Antibiotics
advances in therapy [Allison] *341

Archer, John G.
member, 50-Year-Club, 52-N

Arthritis
rheumatoid, pathogenesis and differential diagnosis [Schiesari] *350

Association of American Medical Colleges

Michigan dean elected president, 60-N

Atherosclerosis
Ole Miss meeting on, 438-N

Athletics
sixth postgraduate conference on the medical aspects of sports, 450-N

sports medicine, postgraduate course on, 438-N

the pros' pet beliefs [Kennedy] 146-E

Automobile
safety, use of cadavers in testing [Kennedy] 717-E

B

Battered Child Syndrome
state's new law, James T. Thompson speaks on, 107-N

Birth Control
population explosion in India [Kennedy] 616-E

Blindness: See National Society for Prevention of Blindness

Blood Banking: See S. C. Association of Blood Banks

Blue Cross-Blue Shield: See Insurance, Health

Book Reviews and Books Received
Adriani, J.: Appraisal of Current Concepts in Anesthesiology, Vol. III [Caine] 251

American Medical Association: Manual on Alcoholism, 726

- Becker, B., and Drews, R. C.: Current Concepts in Ophthalmology [Johnson] 507
- Beeson, P. B., and McDermott, W.: Textbook on Medicine [Brock] 573
- Beacham, D. W., and Beacham, W. D.: Synopsis of Gynecology, 726
- Committee on Preoperative and Postoperative Care, American College of Surgeons: Manual of Preoperative and Postoperative Care [Shands] 725
- Curry, J. L., and Howland, W. J.: Arteriography: Principles and Techniques (Emphasizing Its Application in Community Hospital Practice) [Keel] 101
- Everson, T. C., and Cole, W. H.: Spontaneous Regression of Cancer [Field] 42
- Falkner, F.: Human Development [Ricks] 381
- Fomon, S. J.: Infant Nutrition [Batson] 673
- Frederick, P. M., and Kinn, M. E.: The Office Assistant in Medical Practice, 726
- Hamwi, G. J., and Danowski, T. S.: Diabetes Mellitus: Diagnosis and Treatment, 726
- Hughes, J. G.: Synopsis of Pediatrics [Mangold] 625
- Hunter, G. W., III, *et al.*: A Manual of Tropical Medicine [Brooks] 159
- Ingelfinger, F. J., *et al.*: Controversy in Internal Medicine [Allison] 41
- Kennedy, R. H.: Emergency Care [Field] 254
- Lawton, M. M., and Foy, D. F.: A Textbook for Medical Assistants, 726
- Leopold, I. H.: Ocular Therapy—Complications and Management [White] 326
- Liebman, S. D., and Gillis, S. S.: Pediatrician's Ophthalmology [Stockton] 251
- Luchsinger, R., and Arnold, G. E.: Voice-Speech-Language (Clinical Communication: Its Physiology and Pathology) [Jones] 673
- New Orleans Academy of Ophthalmology: Symposium on Surgery of the Ocular Adnexa [Mills] 101
- Oski, F. A., and Naiman, J. L.: Hematologic Problems in the Newborn [Miller] 159
- Robbins, S. L.: Pathology [Hare] 625
- Sarner, H.: Insurance for the Doctor, 726
- Shands, A. R., Jr., and Raney, R. B., Sr.: Handbook of Orthopaedic Surgery [Turner] 725
- Shirkey, H. C.: Pediatric Therapy 1966-67 [Robinson] 323
- Smith, J. L.: Neuro-ophthalmology, Vol. III, Symposium of the University of Miami and the Bascom Palmer Eye Institute [Abernethy] 437
- Sodeman, W. A., and Sodeman, W. A., Jr.: Pathologic Physiology [Posey] 573
- Wells, B. B., and Halsted, J. A.: Clinical Pathology: Interpretation and Application [Read] 507
- White, P. D.: Hearts: Their Long Follow-up [Rosenblatt] 381
- Willson, J. R., *et al.*: Obstetrics and Gynecology [Dabbs] 437
- Wilter, C. M.: US Army in World War II: Medical Service in the Mediterranean and Minor Theaters [Lotterhos] 101
- Ziegler, Robert F.: Cardiac Evaluation in Normal Infants [Watson] 41
- Brown, Joe D.**
named director of the Mississippi State Board of Health's division of sanitary engineering, 636-N
- Burnstein, Norman**
library given to UMC, 444-N
- C**
- Campbell, Guy D.**
elected vice-president of the Southern Chapter, American College of Chest Physicians, 109-N
- Cancer:** See American Cancer Society, Neoplasms
- Carcinoma**
of cervix, in pregnant patients [Plauche] *647, erratum, 703
- Cardiovascular Disease:** See Heart Diseases
- Carter, Robert E.**
named UMC dean, 45-N
- Central Mississippi Chapter of Multiple Sclerosis**
annual meeting, officers, 335-N
- Cervix**
carcinoma of, in pregnant patients [Plauche] *647; erratum, 703
- Chest:** See Thorax
- Cholera**
jet travel threatens spread, 688-N
- Clinicopathological Conferences**
LXXXIV—20 (Baptist Hospital)
LXXXV—78 (University of Mississippi)
LXXXVI—189 (University of Mississippi)
LXXXVII—289 (Baptist Hospital)
LXXXVIII—360 (University of Mississippi)
LXXXIX—466 (University of Mississippi)
- Chiropractic**
biennial effort to license cult coming [Kennedy] 716-E
- Cobb, Alton B.**
first chairman, Mississippi Regional Medical Program advisory committee, 582-N
- Columbia University School of Public Health and Administrative Medicine**
to study Medicare, 256-N
- Communication**
unusual program on drug information [Kennedy] 32-E
- Contraception:** See Birth Control
- Contraceptives**
intra-uterine devices, use in Sunflower County [Martin] *14
- Cornea**
surgical treatment [McKinney] *61
- Crellin, James A.**
named Mississippi State Board of Health dental health officer, 56-N
- D**
- Davis, Clifton B.**
appointed UMC psychiatry instructor, 586-N
- Deaths**
- Archer, John George, 376
- Austin, Richard Baker, 719
- Barnes, Aaron, 434
- Barnes, Thomas James, 100
- Baskervill, George, 42
- Beeler, James Moss, 624
- Bryan, Albert Coleman, Sr., 243
- Chanton, Edwin Franklin, 434
- Colquitt, Samuel Walter, 376
- Darrington, Gilruth, 100
- Ewing, M. Q., 624
- French, DeWitt Clinton, 434
- Gore, Thomas McFarland, 672
- Harper, William Thomas, 624
- Hoke, Harry Elwood, 243
- Kemp, Emmett Dempsey, 42
- Love, William DeLoss, IV, 434
- Mcllwain, Stova B., 505
- Moore, Dudley Rook, 376
- Pennebaker, David M., 570
- Percy, George Leon, 150
- Petro, Camal Peter, 100
- Riley, Franklin Gail, 377
- Roberts, Richard Harvill, 243
- Simmons, Schubert Bryan, 100
- Terry, Hal Mabry, 570
- Thorne, Edward A., 505
- Trapp, Irvin B., 505
- Trigg, Daniel, 377
- Waring, Marcus Elton, 434
- Welborn, Locke L., 719
- Whitfield, Richard Noble, 570
- Williams, Royal William, 624
- Diabetes:** See American Diabetes Association
- Disaster**
care, in Detroit riot [Kennedy] 617-E
- Drug Industry**
annual cost for drugs for average American [Kennedy] 92-E
consumer price index shows drug price decrease, 336-N, 692-N
new drugs continue decade decline, 176-N
new system of hospital identification for drugs, 246-N
- Philips Roxane to market generic drugs, 638-N
- unusual program for communicating information to physicians and dentists [Kennedy] 32-E
- Drugs**
anti-cancer drug potentiation reported, 690-N
hallucinogenic—STP [Kennedy] 500-E; journal erratum [Kennedy] 615-E
self-medication [Kennedy] 665-E
- E**
- Education, Medical**
ETV system to link five medical facilities, 116-N
European brain drain [Kennedy] 233-E
postgraduate calendar, 39, 97, 153, 243, 319, 377, 433, 503, 562, 619, 670, 722
powerful color TV is teaching aid, 52-N
University of Tennessee preceptor program, 108-N
- Electrocardiography:** See also American EEG Society
effect of potassium ions on the non-specifically abnormal T-Wave [Kellum] *71

Ethics, Medical
credit card financing [Kennedy] 302-E
fee-splitting, American College of Surgeons campaign against [Kennedy] 240-E
Eye
infectious and allergenic conditions [Sanders] *695

F

Farber, Louis A.
named to state physical therapy board, 108-N
Federal Trade Commission
Pfizer to appeal decision on tetracycline patent, 683-N
Fertility
fourth decade study, 689-N
Films
AMA library increases services, 176-N
Frazier, Thomas W.
named to Fifty Year Club, 339-N

G

Gaston, Cecil L., Jr.
has caduceus swiped, 515-N
General Practice: See American Academy of General Practice
Geriatrics: See American Geriatric Society
Grimes, D. Andrew
named UMC associate director, 734-N

H

Hart, Philip A., Sen.
Medical Restraint of Trade Act, [Kennedy] 146-E
Health
care—costs (survey on medical services by New York Bank) 502-N, (rise attributed to hospitals) 382-N; dollar, effective use [Marshall] *1; manpower shortages, book on programmed instruction and the hospital, 392-N; shift in allocation of health care dollar [Kennedy] 432-E
YWCA stand, program, 629-N
Health Insurance Council
eastern conference, speaker hits hospital costs, 735-N
Health Insurance Institute
book on health education, 444-N
reports state's coverage, 394-N
Heart: See also American Heart Association
effect of potassium ions on the non-specifically abnormal T-Wave [Kellum] *71
temporary artificial pacing [Blake *et al.*] *654
Heart Diseases
coronary, St. Dominics' care unit [Rosenblatt] *708
coronary, postgraduate symposium on [Rosenblatt]—Part I, etiology of atherosclerosis, *5; Part II, diagnosis of myocardial infarction from electrocardiogram, *129; Part III, complications in management of the acute myocardial infarction, *295; Part IV, management of the acute stage from the standpoint of arrhythmias, *459; Part V, five major complications

of the healing and recovery stage following acute myocardial infarction, *596

Hemolytic Disease
due to anti-D isoimmunizations in the first born infant [Coffey] *17

Hendrick, Jim G.
named Man of the Month by Jackson Chamber of Commerce, 688-N

Hicks, G. Swink
president of the Mid-South Postgraduate Medical Assembly [Kennedy] 699-E

Hospital Research and Educational Trust
book on programmed instruction and the hospital, 392-N

Hospitals: See also American Hospital Association

are costs rising faster than financing can match?, 735-N

coronary care unit at small community hospital [Rosenblatt] *708

cost, price of people is crucial quantity [Kennedy] 495-E

heliport at the Methodist Hospital at Memphis, 436-N

manpower shortage, book on use of programmed instruction to offset, 392-N

minimum wage zooms costs, 396-N

physicians should serve as trustees [Kennedy] 665-E

utilization review—committees, role and function [Marshall] *1; state conferences on, 675-N

Hypertension
due to primary aldosteronism, test to demonstrate pathologic secretion of aldosterone [Birchall & Batson] *121

I

Infant, Newborn
book on respiratory adaptation, 165-N

hemolytic disease due to anti-D isoimmunizations in a first born infant [Coffey] *17

prematurity, AMA international conference on, 678-N

Infertility
in female, treatment (Wiener) *354

International College of Surgeons

House of Delegates, names Lawrence W. Long chairman of the Board of Trustees, 684-N

Insurance, Health: See also Social Security

Blue Cross-Blue Shield—California plan sets payment record, 528-N; National Association (makes history with 'usual-customary' reimbursement for steel-workers) 629-N, (National Association of Blue Shield Plans supports private sector in Medicare) 688-N, (new national headquarters) 336-N; state program (new physicians' manual) 164-N, (president named health economics institute advisor) 728-N (professional relations representative for North Mississippi named) 170-N, (offers new contracts) 578-N, (board of directors hold 20th annual meeting) 258-N
coverage of Mississippians, 394-N

the two class system of health care must go, 694-N

Insurance Industry
realistic health and accident coverage protection for women [Kennedy] 559-E

International Association for Accident and Traffic Medicine
third triennial congress, 646-N

International Business Machines Corporation
opens medical liaison service, 170-N

J

Jaquith, W. L.
receives 1966 Missy Award, 202-N

Jurisprudence
study of court decisions concerning anesthesia, 340-N

K

Kidney
renal failure, acute, diagnosis and management [Bower and Brent] *542

peritoneal dialysis, portable automatic machine built, 113-N

L

Lederle Laboratories

American Geriatrics Society grants available, 258-N

new booklet on TB, 112-N

Legislation
abortion laws [Kennedy] 661-E
doctor draft law, need for change [Kennedy] 27-E

Keogh Act, 1966 amendments, 729-N

Medical Restraint of Trade Act [Kennedy] 146-E

state battered child law, James T. Thompson speech on, 107-N

state fireworks laws [Kennedy] 713-E

Letters to the Editor
explanation requested on need for Workmen's Compensation forms [Stone] 718

Life Insurance Medical Research Fund

grants and fellowships total \$1.5 million, 689-N

Lilly, Eli, and Company
offers new hospital unit dose, 246-N
new Cordran package size, 382-N

Long, Lawrence W.
named chairman of the Board of Trustees, International College of Surgeons [Kennedy] 668-E, 684-N

Lotterhos, William E.
chairman of the board of directors of the American Academy of General Practice [Kennedy] 668-E, 680-N

named to state physical therapy board, 108-N

Louisiana Thoracic Society
postgraduate course on pulmonary function in health and disease, 691-N

Love, William D.
UMC Chair of Cardiovascular Research named in memory of, 736-N

Lull, George F.
named executive secretary, Illinois State Medical Society, 264-N

Lupus Erythematosus
case report and review of the literature [Tolbert] *601

M

Malaria

drug-resistant strains, use of sulfa combination, 102-N

Maternal Mortality

MSMA Study, Case Report XIII [Brock] *409

Measles

the inexcusable tragedy [Kennedy] 301-E

Medical Association of Georgia

campaign against moonshine [Kennedy] 502-E

Medical Careers

AMA medical careers booklets, 176-N

Medical College of Alabama

widow endows chair for professors with interest in diabetes and metabolic diseases, 629-N

Medical Education: See Education, Medical

Medical Ethics: See Ethics, Medical

Medical Organization: See also specific titles such as American Medical Association, Mississippi State Medical Association

state and national meeting schedules, 84, 133, 228, 299, 506, 555, 711

Medical Practice

Alabama M.D.'s face license fee hike, 515-N

professional courtesy and the changing times [Kennedy] 559-E

New Members

Ball, George, 435

Ball, Ottis Gene, 242

Blackburn, Claude Jack, 96

Bowlin, John Wesley, 672

Burnett, William Joseph, 318

Burrus, Swan Brasfield, 318

Campbell, Mike Carroll, Jr., 376

Carr, William Jolly, Jr., 435

Cheek, Howard B., 96

Cole, Robert J., 318

Copeland, Clyde Xenophon, Jr., 318

Craddock, Culver Carter, 376

Dawkins, William Huddleston, 243

DeGiorgio, Eugene Rocco, 618

Ellis, Marshall Stone, 435

Estess, John Murray, 96

Fleming, Richard Charles, Jr., 96

Flowers, Richard Harold, Jr., 318

Fulton, Warren Carlton, 318

Girouard, Darrell Philip, 96

Harmon, Roy Franklin, Jr., 376

Hey, John Phenix, III, 719

Hopson, William Briggs, Jr., 719

Hull, Calvin Travis, 243

Hull, Clarence G., III, 719

Kilgore, Thomas Lafayette, Jr., 243

Lee, Alfred Engine, 96

Lockey, Myron Willis, 96

McKee, Wilbur Eilers, 96

Merrell, Wafford Humphries, Jr., 38

Moore, John Wilson, 150

Nail, Henry Ray, 38

Owen, David McIntosh, 243

Peede, Robert Louis, 318

Pontius, William Frederic, 318

Robinson, Everett Edwin, III, 243

Rush, Leslie Vaughan, Jr., 318

Sams, James Henry, 318

Sandefur, John Carroll, 719

Santina, Henry, 567

Schmidt, Harry Johnson, Jr., 435

Shaw, Graham Boyd, 243

Spencer, Gilbert Orion, Jr., 150

Thiede, Henry Armstrong, 618

Triplett, Rodney Faser, 38

Tucker, Frank Howard, Jr., 96

Vick, Walter Dean, 719

Walker, Gene Talmadge, 150

Webb, Henry Harold, 38

White, Elbert Asa, III, 96

Wilson, William Barr, 436

Yelverton, Richard Leroy, 719

Mental Health

community, the physician's role [McCurdy] *604

Mental Illness: See also Mississippi Interagency Commission on Mental Illness and Mental Retardation skilled personnel, key to care [Head] 87-E

Mental Retardation: See also Mississippi Interagency Commission on Mental Illness and Mental Retardation

Mississippi Academy of General Practice

1967 scientific assembly, 732-N

Mississippi Agricultural and Industrial Board

"Discover Mississippi" program, 254-N

Mississippi Association of Medical Assistants

asks support of medical doctors, 508-N

Mississippi Heart Association

Chair of Cardiovascular Research at UMC renamed, 736-N

14th annual cardiovascular seminar, 181-N

furnishes mannikin for training in resuscitation, 174-N

names new officers, 578-N

1967 grant program, 48-N

Mississippi Hospital and Medical Service: See Insurance, Health

Mississippi Interagency Commission on Mental Illness and Mental Retardation

new construction plan, 734-N

Pepper, T. C., Jr., joins staff, 56-N

report on first year, 438-N

Mississippi Medical College

history [Kitchens] *549

Mississippi Medical Political Action Committee

dues billing to be done jointly with AMPAC, 730-N

Mississippi Regional Medical Program

advisory committee, Alton B. Cobb named chairman, 582-N

Hudson, Charles R., new executive, 646-N

Mississippi Society for the Prevention of Blindness

new film available, 450-N

opens headquarters office, 60-N

Mississippi State Board of Health

certifies 127 providers of care, 570-N

conference on utilization review in hospitals, 675-N

disaster service, 334-N

Division of Preventive Disease Control, director advises immunization against bubonic plague for Viet Nam travelers, 53-N

Division of Public Health Dentistry, Dr. James A. Crellin named assistant to the director, 56-N

meeting on smoking and health for young people, 505-N

Sunflower County Health Department, intra-uterine device program [Martin] *14

two division directors named, 636-N

vital statistics on state's population, 377-N

Mississippi State Board of Nurse Examiners

Sutherland, C. G., named member, 262-N

Mississippi State Board of Physical Therapy

two physicians appointed, 108-N

Mississippi State Medical Association

board of trustees, schedules regional informational meetings on Title XIX, 163-N

Clarksdale and Six Counties Medical Society, names officers, 730-N

Coast Counties, honors Dr. Van Pelt, 52-N

Constitution and By-Laws, 415

Council on Medical Service, conferences on utilization review in hospitals, 675-N

Council on Scientific Assembly, plans for 100th Annual Session, 441-N

Delta Medical Society, honors Dr. Archer, 52-N

Fifty Year Club, new members—Archer, John G., 52-N; Frazier, Thomas W., 339-N; Raney, Daniel H., 732-N; Van Pelt, James F., 52-N

headquarters building architect dies, 689-N

Health Insurance Benefits Advisory Committee, meets with key figures in Medicare, 338-N

life insurance group gets benefit increase, 582-N

members hold important national chairmanships [Kennedy] 668-E

Mississippi Doctor, back issues sought, 396-N

names regional medical program member, 510-N

99th Annual Session—fellowship events, 255-N; House of Delegates—(handbook) 229, (news report of actions) 388-N, (formal proceedings) 475-N; news report, 383-N; officers, 388-N; official call and program, 201-N; picture layout, 384-N

100th Annual Session, Council on Scientific Assembly begins planning, 441-N; plans announced, 727-N

placement publication launched, 109-N

President's Page, Thompson—Postgraduate Education, 26; Health Careers, 86; Title XIX meetings, 140; Task of Decision, 232; The Last Word: Thanks, 300

President's Page, Ainsworth—The Benefit of Our Concerns, 366; Home Health Services, 414; Usual and Customary, 494; Utilization Review, 556; The Most Important Dues, 608; There's No Tomorrow, 660; The Physician's Loyalty, 712

regional information meetings on Title XIX, 262-N

Robins Award, seventh presentation slated, 733-N

trustees, councils and committee listings, 83, 200, 330, 693

Mississippi State University

to study effects of pesticide on humans, 735-N

Mississippi Thoracic Society
tri-state consecutive case conference, 181-N

Mississippi Tuberculosis Association
tri-state consecutive case conference, 181-N

Moore, Steven L.
named director of the Division of County Health Work, Mississippi State Board of Health, 636-N

Morbidity
state monthly totals—40, 100, 156, 322, 380

Mortality: See Maternal Mortality

Multiple Births
Mexican octuplets, 256-N

Multiple Sclerosis
seminar on, 182-N

N

Nasopharynx
cancer of [Mounger] *286

National Association of Medical Examiners

serving better the cause of justice [Kennedy] 314-E

National Federation of Independent Business

poll on including cost of prescription drugs under Medicare [Kennedy] 372-E

National Health Federation
organization for quackery [Kennedy] 32-E

National Library of Medicine
Cumulated Index Medicus publication, 182-N

National Society for Crippled Children and Adults

1967 annual convention, 674-N
scholarship for training in physical or occupational therapy, 100-N

National Society for the Prevention of Blindness

new research grants, 338-N

Nelson, Howard A.
president, University of Mississippi Alumni Association [Kennedy] 669-E

Neoplasms
cancer of the nasopharynx [Mounger] *286

human virus-cancer research, leads expected from search for cancer-causing viruses in naturally occurring solid tumors of laboratory animals, 624-N

investigation of causal relationship between cancer and DNA viruses, 102-N

New Orleans Graduate Medical Assembly

1967 annual meeting, 59-N

Nose
infectious and allergenic conditions [Sanders] *695

Nursing
more RN's for Mississippi [Kennedy] 716-E

'neuronurse' training program, 733-N

Nursing Homes
care, serious crisis today [Kennedy] 141-E

O

Obesity
seminar on, 177-N

Obstetrics
middle-of-the-night births are in minority [Kennedy] 562-E

Occupational Health
survey to learn more about industrial workers' adverse reactions to hazardous materials and sources of energy, 584-N

Orthopaedics: See American Academy of Orthopaedic Surgeons

Ovarian Dysfunction
treatment with cortisone or estrogen [Jefferies] *279

P

Pancreatitis
acute, incidence, diagnosis and treatment [Safley] *451

Pankratz, David S.
named USC dean emeritus, 448-N

Parke, Davis and Company
chairman and chief executive officer named, 182-N

Parsons, Willard H.
appointed surgeon emeritus to U. S. Army Medical Service, 676-N

Pediatrics: See American Academy of Pediatrics

People to People Health Foundation
S. S. Hope—to sail for Colombia, 56-N; receives gala send-off, 340-N

Pepper, T. C., Jr.
joins staff of Mississippi Interagency Commission on Mental Illness and Mental Retardation, 56-N

Personals

Adkins, Jerry R., 563

Akin, Robert M., 94

Alexander, James E., 94

Alexander, Richmond L., 242

Arrington, Myron L., 374

Austin, S. D., 669

Ball, Ottis G., 434

Banahan, Benjamin F., Jr., 242

Barkley, Jare L., 150

Barnett, William O., 504

Batson, Blair E., 504

Baumhauer, Emile M., Jr., 34

Berman, Maxwell D., 504

Bird, Bill J., 563

Blackburn, Claude J., 566, 718

Bolton, Eldon L., 718

Bobo, E. E., 563

Bobo, William B., 504

Bolton, D. L., 34

Bostwick, Robert H., Jr., 242, 504

Bouchillon, C. D., 38, 563

Bramlitt, E. E., 376, 504

Brent, Alvin, Jr., 669

Brock, H. D., 563

Brock, Ralph L., 563

Brown, J. A., 617

Buckly, Theresa L., 718

Burgess, C. Duane, 669

Burman, Richard G., 34, 434, 718

Burrow, Harry E., Jr., 563

Busey, John F., 376

Byrne, George W., 150

Campbell, Guy D., 374, 669

Carr, I. P. 374

Carroll, H. Reed, 718

Carter, Robert F., 94, 374

Cash, Jack Q., 376

Causey, Jack Q., 563

Clements, Kenneth M., 566

Cleveland, C. Hal, 34

Clippinger, David L., 94, 718

Cole, Robert J., 566

Cole, Wilfred Q., 148

Countiss, Eugene, 434

Cowser, Louis E., 617

Craig, H. Vann, 376

Crawford, Ben L., Jr., 148

Crawford, Walter W., 148

Curry, Max A., 94

Dabney, W. Moncure, 566

Dabbs, O. D., Jr., 718

Dale, David B., 374

Dale, Robert A., 669

Davidson, L. Stacey, Jr., 566

Davis, Thomas M., 242

DeGiorgio, Eugene R., 504

Duck, Ernest G., 242

Dugger, A. F., Jr., 566, 669

Eckford, John F., 376

Elliott, John P., Jr., 148

Ellis, E. E., 38

Everett, William F., 94

Fairchild, H. M., 566

Farmer, Charles E., 718

Fisackerly, James S., 566

Flagg, G. B., 242, 316

Fleming, Richard C., 566

Fleming, T. Y., 617

Ford, Ralph D., 38

Forshner, John G., 566, 669

Franks, Cecil S., 669

Frye, Harry C., 617

Fulton, Warren C., 504

Furr, Richard T., 148, 316, 504, 566, 617

Garbin, Frank G., 504, 566

Gard, Paul D., Jr., 150

Gibson, Leo, 566

Gilbert, James E., 566

Gillespie, Guy T., 669

Gilmore, James O., 150

Godbey, Marian W., 94, 669

Golden, Max L., 242

Graves, James A., 669

Grenfell, Raymond F., 242

Griffing, Joseph C., 34, 718

Gruich, Frank G., 94

Gunn, Clyde H., Jr., 566

Hamilton, George C., Jr., 718

Hamrick, DeWitt, 504

Hanes, I. C., 566

Harris, Elmer J., 434

Harris, John E., 150, 718

Harvey, Marvin V., 566

Hawkins, Mary E., 566

Hayes, Frank, 376

Hays, Frank B., 34

Henderson, Robert P., 434

Hendrick, Jim G., 242, 435

Hey, John, 669

Hiatt, Warren A., 617

Hill, Fred D., 316

Hinman, M. E., 718

Hogan, Marcus L., III, 566

Hollingshead, Charles A., 34

Hollis, Richard S., 566

Hoover, Billy B., 150

Hopkins, Donald A., 566

Hopson, W. Briggs, 617

Horn, Paul L., Jr., 94, 567

Howell, James M., 718

Hudson, J. Manning, 434

Hughes, Jerald S., 34

Hulett, Alexander W., 34

Hull, C. G., 316

Jarratt, Guy C., 316

Johnston, Joseph E., 242

Justice, Thurman T., 376

Keady, Dwight S., 376

Kellum, Henry J., Jr., 376

Killelea, Donald E., 435

Kisner, W. Howard, 376

Kroeze, H. A., 718

Laird, Earl L., 150

Laird, John S., 617

Lake, Wesley W., 718

Lamb, J. Weldon, 718
 Lane, Dewey H., Jr., 504
 Lassen, Raymond V., Jr., 566
 Lee, Albert Ray, Jr., 505
 Leggett, Frank L., 374
 Lewis, Henry L., 617
 Lewis, Theodore T., 34
 Lindsey, Arthur W., Jr., 669
 Lockard, Blanche, 566
 Long, John H., 669
 Lotterhos, William E., 242
 Lucas, John F., Jr., 718
 Lucas, John F., Sr., 718
 Lummus, Floyd L., 566
 McCraw, Ernest J., 242
 McEachin, John D., 94, 150
 McKlemurry, Cecil C., 242
 McLeod, John A., III, 316
 McMillan, Dean R., 566
 McMillon, Joseph B., 316
 McQuinn, William C., 718
 Mann, John E., 566
 Martin, George H., 316
 Martin, Raymond S., Jr., 434
 Martinolich, Andrew K., Jr., 38, 316
 May, W. R., 316
 Mayers, William M., 242
 Metcalfe, Orrick, Jr., 316
 Milam, John T., 669
 Moffitt, Ellis M., 148
 Moore, D. H., Jr., 566
 Moore, D. H., Sr., 566
 Moore, E. Lowry, 566
 Moore, Paul H., 316, 567
 Moore, Steven L., 94
 Moorhead, Robert J., 38
 Morris, Lawrence B., 316
 Motley, Ray F., 38, 505
 Mullens, John R., Jr., 669
 Mutziger, Dudley H., 669
 Nelson, Howard A., 435
 Nelson, Phil, 563
 North, Edward, 617
 Owen, George W., 148
 Pace, Brantley B., 242
 Packer, James M., 434
 Passman, Carl, 567
 Perry, Alton R., 669
 Plauche, Warren C., 94, 242
 Potter, Bill, III, 669
 Purks, W. K., 94
 Raines, Oney C., III, 718
 Read, Allen M., 567
 Riecken, William E., Jr., 617
 Riemann, E. T., Jr., 718
 Roberts, Arthur J., 566
 Roberts, Curtis D., 618, 718
 Robertson, Brown, 669
 Robinson, Guy H., 567
 Ross, T. E., III, 669
 Ross, Edward V., 567
 Russel, J. C., Jr., 669
 Russell, James R., 150
 Russell, John F., 376
 Safley, James E., 567
 Sams, James H., 150, 316
 Sandifer, Fred M., 718
 Scanlon, Leo J., Jr., 567
 Schmidt, Harry J., Sr., 94
 Schuster, Richard E., 718
 Schwartz, Robert E., 374
 Sekul, Wallace S., 94
 Sharpe, Guy P., Jr., 718
 Sheffield, G. T., 505
 Sheffield, James A., 505
 Sheffield, T. E., 505
 Shoemaker, Joseph H., 150
 Simmons, Omar, 618
 Simmons, Walter H., 376
 Sneed, Ralph, 96

Spell, B. G., 96
 Stephens, Joe K., 669
 Stewart, Edsel F., 316
 Stewart, Ray H., 38
 Stewart, W. K., 150
 Stingley, James R., 94
 Taintor, Charles W., III, 38
 Taquino, Maurice A., 94
 Tatum, Frank, 316, 618
 Taylor, C. D., Jr., 718
 Tennehill, Antone W., Jr., 566
 Terrell, Kenneth D., 374
 Thornton, James L., 504
 Todd, Norman W., 242, 718
 Triplett, R. Faser, 148
 Tucker, Frank H., Jr., 242
 Tyrone, Nelson O., 374
 Van Landingham, David J., 435
 Waddell, James H., 316
 Walden, Gerald M., 38
 Weems, William E., 38
 Werkheiser, Edwin B., 150
 Wessler, Gerald, 505
 White, Reginald P., 435
 White, William B., 38, 150, 242
 Wiener, William B., 566
 Wiggins, J. P., 669
 Williams, Charles O., 563
 Williams, J. Collins, 242
 Williams, Thomas K., Jr., 38, 376
 Wood, J. O., 567
 Wright, Harvey B., 242
 Yates, A. J., 563
 Yelverton, Richard L., 505
Pfizer Co.
 to appeal FTC decisions, 683-N
 to award 94 medical scholarships,
 254-N
**Pharmaceutical Manufacturer's As-
 sociation**
 answers FDA 'shotgun' charge, 55-N
 chairman sees rise in bootleg drugs,
 158-N
 offers total quality guidelines, 694-N
Phillips Roxane Laboratories
 to market generic drugs, 638-N
Phosphatases
 leukocyte alkaline, methods to de-
 termine concentration and place
 in diagnosis [Higgins] *704
Physicians
 changes in doctor draft law needed
 [Kennedy] 27-E
 high rating in public opinion polls
 [Kennedy] 34-E
Poisoning
 control, conference on, 162-N
 coral snake venom antidote, 339-N
Pregnancy
 carcinoma of cervix [Plauche] *647,
 erratum, 703
Psychiatry
 classification of beatniks [Kennedy]
 374-E
Purvis, George D.
 address before AMA Congress on
 Occupational Health—announce-
 ment of, 578-N, report of, 678-N

Q

Quackery
 the National Health Federation
 speaks for [Kennedy] 32-E

R

Radiologic Seminars
 LVII—Blow-out Fractures of the
 Orbit [Dominick] 19
 LVIII—Peyronie's Disease [Hick-
 man] 76

LIX—Vertebral Cupping in Sick-
 le Cell Disease [Ferguson] 134
 LX—Drip Infusion Nephrotomog-
 raphy [Henderson] 196
 LXI—The Significance of Gas Shad-
 ows in the Biliary Tree [Hamer-
 nik] 284
 LXII—Cervical Rib [Hale] 357
 LXIII—Pectus Excavatum [McCay]
 412
 LXIV—Pneumoperitoneum in the
 Newborn [McLeod] 464
 LXV—Osteoid Osteoma [Luiña] 540
 LXVI—Gallstone Ileus [Sullivan]
 594
 LXVII—Bronchial Adenoma
 [Moore] 652
 LXVIII—Villous Tumors [Hyman]
 700
Radiology: See American College of
 Radiology
Raney, Daniel H.
 named to 50 year club, 732-N
Research
 federal dollar, mixed blessings [Ken-
 nedy] 423-E
Respiratory Disease
 relationship to socioeconomic states
 [Kennedy] 312-E
Rhode Island Medical Society
 sixth postgraduate conference on the
 medical aspects of sports, 450-N
Robins, A. H., Company
 new research addition, 730-N
 seventh MSMA award slated, 733-N
Ross, T. E., Jr.
 honored by Hattiesburg Kiwanis
 Club, 392-N
Royal Society of Medicine
 sponsors new foundation, 684-N
Royals, James L.
 named regional medical program
 member, 510-N
**St. Dominic's Jackson Memorial
 Hospital**
 coronary care unit [Rosenblatt]
 *708

S

Scanlon, Leo J., Jr.
 candidate for coroner of Adams
 County, 394-N
Seborrhea
 AMA symposium on, 381-N
Sex
 the YWCA stand, 629-N
Smoking
 and health of young people, meeting
 on, 505-N
 and health, what is needed is edu-
 cation [Kennedy] 609-E
 current status in relation to medicine
 [Milan] *126
Social Security
 administration, engages Columbia
 University School of Public
 Health and Administrative Medi-
 cine to study Medicare, 256-N
 administration, special citation to
 state director of disability determi-
 nation unit, vocational rehabilita-
 tion division, 395-N
 big government in big business [Ken-
 nedy] 92-E
 Medicare—cost question, the answer
 is more [Kennedy] 557-E; cuts
 legal red tape, 42-N; extended
 care facilities, deposits not re-
 quired, 510-N; National Federa-
 tion of Independent Business, poll
 on including cost of prescription

drugs [Kennedy] 372-E; state board of health certifies 127 providers, 570-N
Title XIX—adoption of medically-oriented state program urged [Thompson] *405; MSMA—developed brochures on, 578-N; optometrists' position [Kennedy] 428-E; new commissioner, 636-N; regional information meetings, 163-N, 262-N
South Central Association of Blood Banks
 ninth annual meeting set for Jackson, 174-N
Southern Medical Association
 Section on Plastic and Reconstruction Surgery, James H. Hendrix, Jr., named assistant secretary, 181-N
 Vise, Guy T., installed as president, 48-N
Squibb, E. R., and Sons
 commissions medical art collection, 512-N
State Medical Journal Advertising Bureau
 joined by Puerto Rico Journal, 450-N
Student American Medical Association
 Eaton Medical Art Awards, 528-N
Surgery: See American College of Surgeons
Sutherland, C. G.
 member state board of nurse examiners, 262-N
Syntex Labs
 new M.D. executive, 528-N
 pharmaceutical division, offers new Synalar dosage forms, 584-N

T

Tenodesis
 hand brace for patients, 583-N
Tetanus
 treatment with injectable diazepam [Lockwood & Allison] *66
Thompson, James T.
 keynotes judges' convention on battered child law, 107-N
Thorax: See also American College of Chest Physicians
 New Orleans postgraduate course on pulmonary function, 691-N
 tri-state consecutive case conference, 181-N
Throat
 infectious and allergenic conditions [Sanders] *695
Thyroid Disease
 current knowledge [Langford] *657
Tisdale, William A.
 to serve as Harrison County representative, 684-N
Tobacco: See Smoking
Trauma
 advances in treatment of [Field] *589
Tuberculosis
 Lederle Laboratories booklet on, 112-N

U

Ulcer
 duodenal, refinements in surgical management [Barnett] *397
U.S. Internal Revenue Service
 tax automation [Kennedy] 148-E
U.S. Office of Economic Opportunity

area and neighborhood health center program [Kennedy] 238-E
U.S. National Institutes of Health
 approves Mississippi regional medical program and funds \$322,800, 509-N
 coronary drug research grant given to UMC, 528-N
 devises new heart valve, 682-N
 grant to American College of Surgeons to study hospital facilities and staff in cancer care, 515-N
 leads for human virus-cancer research expected from search for cancer causing viruses in naturally-occurring solid tumors of laboratory animals, 624-N
National Cancer Institute, investigation of possible causal relationship between DNA viruses and human cancer, 102-N
National Institute of Allergy and Infectious Diseases—study of use of sulfa combinations in malaria, 102-N; to study medicine of Arctic, 326-N
National Institute of Child Health and Human Development, book on neonatal respiration, 165-N
National Institute of Mental Health, grant to AAGP, 436-N
 study on relationship of socioeconomic status and respiratory disease [Kennedy] 312-E
U.S. Public Health Service
 film on emergency health care available, 638-N
 freight train menace [Kennedy] 372-E
 grants for regional medical programs, 57-N
 Indian health program [Kennedy] 367-E
 investigation of causal relationship between DNA viruses and human cancer, 102-N
National Library of Medicine, senate confirms two new regents, 639-N
 study on medical x-ray exposure of average American, 168-N
 study on what average American spends for medicines annually [Kennedy] 92-E
 Urban, Industrial Health Center relocated, 646-N
U.S. Senate
 Subcommittee on Employment, Manpower and Poverty—MSMA testimony in "hunger hearing" [Lotterhos and Kennedy] *535; Mississippi witnesses at "hunger hearing," 575-N
University of Alabama Medical Center
 Seminar on Multiple Sclerosis, 182-N
University of Tennessee College of Medicine
 interfaith center, 332-N
 new school planned for Knoxville, 336-N
 preceptor program, 108-N
University of Mississippi
 Medicinal Chemistry Conference on Atherosclerosis, 438-N
 School of Pharmacy, conference on poison control, 162-N

University of Mississippi School of Medicine
 annual visiting professor of surgery, 52-N
 Alpha Omega Alpha honor medical society, students named to, 511-N
 associate director named, 734-N
 Carter, Robert E., named dean, 45-N
 Chair of Cardiovascular Research renamed, 736-N
 circuit courses, spring, 168-N
 Class of '71, largest admitted, 633-N
 enters coronary drug research, 528-N
 faculty, new, and promotions, 513-N; 736-N
 hemodialysis unit opened, 334-N
 library, Burnstein books donated, 444-N
 memorial library to honor John Robert Snavely, 694-N
 1967 commencement—speaker named, 318-N; 114 graduate, 445-N
 1967 UMC Day, 177-N
 nurse anesthetist program opened, 735-N
 senior receives DePuy Holy Fellowship in orthopaedic surgery, 692-N
 surgery resident wins SMA residency training grant, 583-N
 visiting staff member from Poland makes sentimental visit to Kosciuszko, 449-N
 Wiser, Winfred Lavern, appointed assistant professor of ob-gyn, 174-N
Upjohn Company
 anticancer drug potentiation reported, 690-N

V

Vaginitis
 concepts of therapy [Gardner] *529
Van Pelt, James F.
 named to Fifty-Year-Club, 52-N
Vertebra
 collapsed, restoration of body shape in children [Imrie] *183
Viruses
 DNA, causal relationship to cancer, investigation of, 102-N
Vise, Guy T.
 president, Southern Medical Association—installation, 48-N; one of MSMA members who are leaders [Kennedy] 669-E

W

Wilson, David B.
 named AHA president, 627-N
 named chairman of the board of trustees, American Hospital Association [Kennedy] 668-N
Wiser, Winfred Lavern
 named UMC assistant professor of ob-gyn, 174-N
Woman's Auxiliary
 MSMA—leadership workshops, 117-N; new officers, 390-N
Woosley, J. C.
 appointed adviser to institute of health economics, 728-N
Workmen's Compensation
 standardized forms [Purvis] *455
 what's the need for 'paper work and red tape'? [Stone] 718-L
Wyeth Laboratories
 new liquid unit dose, 514-N
 offers coral venom antidote, 339-N
 pediatric fellowships available, 570-N

AUTHOR INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "BR," Book Review; "L," Letters to the

Editor; "PP," President's Page; "RS," Radiologic Seminar. The asterisk (*) indicates an original article in the JOURNAL.

A
Abernethy, L. D., 437-BR
Ainsworth, T., 366-PP, 414-PP, 494-PP, 556-PP, 608-PP, 660-PP, 712
Allison, F., Jr., 41-BR, *66, *341

B
Barnett, W. O., *397
Batson, B., 673-BR
Batson, H. M., Jr., *121
Birchall, R., *121
Blake, T. M., *654
Bower, J. D., *542
Brent, A. E., *542
Brock, R. L., *409, 573-BR
Brooks, T. J., Jr., 159-BR

C
Caine, C. W., 251-BR
Coffey, J. D., Jr., *17

D
Dabbs, J. B., 437-BR
Derian, P. S., *198
Dominick, T. B., 19-RS

F
Ferguson, J. V., Jr., 134-RS
Field, R. J., Jr., 42-BR, 254-BR, *589

G
Gardner, H. L., *529

H
Hale, C. R., 357-RS
Hamernik, F. J., 284-RS
Hare, W. V., 625-BR
Head, J. J., 87-E

Henderson, R. P., 196-RS
Hickman, B. T., 76-RS
Higgins, L. C., *704
Hyman, O. W., 700-RS

I
Imrie, D. T., *183

J
Jefferies, W. McK., *279
Johnson, R. A., *654
Johnson, S. B., 507-BR
Jones, E. H., 673-BR

K
Keel, D. T., Jr., 101-BR
Kellum, W. C., *71
Kennedy, R. B., 27-E, 32-E, 34-E, 92-E, 141-E, 146-E, 148-E, 233-E, 238-E, 240-E, 301-E, 302-E, 312-E, 314-E, 367-E, 372-E, 374-E, 423-E, 428-E, 432-E, 495-E, 500-E, 502-E, *535, 557-E, 559-E, 562-E, 609-E, 615-E, 616-E, 617-E, 661-E, 665-E, 668-E, 713-E, 716-E, 717-E
Kitchens, B. E., *549

L
Langford, H. G., *657
Lockwood, W. R., *66
Lotterhos, W. E., 101-BR, *535
Luina, R. R., 540-RS

M
McCay, T. S., 412-RS
McCurdy, R. L., 604
McKinney, J. W., *61
McLeod, H. C., Jr., 646-RS
Mangold, M. J., 625-BR

Marshall, M., Jr., *1
Martin, T. S., *14
Milam, J. T., *126
Miller, J. B., Jr., 159-BR
Mills, H. P., Jr., 101-BR
Moore, P. H., 652-RS
Mounger, S. G., *286

P
Plauche, W. C., *647
Pombo, E., *654
Posey, E. L., 573-BR
Purvis, G. D., *455

R
Read, A. M., 507-BR
Ricks, H. C., 381-BR
Robinson, J. N., 323-BR
Rosenblatt, W. H., *5, *129, *295, 381-BR, *459, *596, *708

S
Safley, T. J., Jr., *451
Sanders, S. H., *695
Schiesari, L., *350
Shands, W. Coupery, 726-BR
Stockton, W. H., 251-BR
Sullivan, A. W., 594-RS

T
Thompson, J. T., 26-PP, 86-PP, 140-PP, 232-PP, 300-PP, *405
Tolbert, V. S., *601
Turner, T. C., 725-BR

W
Watson, D. G., 41-BR
White, J. J., 326-BR
Wiener, W. B., *354

TABLE OF PAGES

January 1 to 60
February 60 to 120
March 121 to 182
April 183 to 278
May 279 to 340
June 341 to 396

July 397 to 450
August 451 to 528
September 529 to 588
October 589 to 646
November 647 to 694

December 695 to
By-Laws of the
Association 415 to 422
Transactions of the
1967 House of
Delegates 475 to 527



X68-2078

Mississippi state medical
association. Journal.
v.8, 1967.

DATE	ISSUED TO
DEC 23 '70	

MAY 2

X68-20

Mississippi state medical association. Journal.
v.8, 1967.

RETURN THIS BOOK ON OR BEFORE LAST DATE STAMPE

DEC 23 '70 XEROX
MAY 2 '73
RET'D. MAY 1 1973

